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ABSTRACT

Lessons in this document are the product of a senior high school teachers' workshop sponsored by the State Project to Implement Career Education (SPICE) in New York City schools. These career education sample lessons, covering nine subject areas, are designed to be used along with regular curriculum materials and relate to self-awareness, career awareness, educational awareness, economic awareness, decisionmaking skills, employability skills, appreciations and attitudes, and beginning competencies. The nine subject areas are language arts (English, literature, drama/speech, reading, journalism), mathematics, science/biology, social studies, law in American society, art (high school art, art advertising, fashion design), industrial arts, music, and the world of work. Each lesson includes a curriculum concept, related career education concept, themes and objectives, activities, resources, and a method for student evaluation. (TA)

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CAREER EDUCATION

SAMPLE LESSONS

To Parallel the New York City
Public Schools Senior High School Curriculum

STATE PROJECT TO IMPLEMENT CAREER EDUCATION
(S.P.I.C.E.)

Developed by Teachers from Erasmus High School, Brooklyn
Herbert A. Lehman High School, Bronx
New York City Public Schools

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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CE 010 435

SPACE

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INTRODUCTION

Career education is an innovation that is thought to hold the potential for a wide variety of improvements to our formal educational system without requiring major changes to the current organizational patterns of schools. It is thought that through career education the following changes may occur:

1. Students will become more self-motivating and more goal directed. They will know more about themselves and their opportunities, and they will set goals and plan for the accomplishment of their goals.
2. Formal educational experiences will become more relevant to activities outside the school building. Individuals will understand how skills and knowledge gained in school impact their lives and they will learn how to use education to accomplish their goals.
3. The walls of the school building will be broken down and education will become a school and community activity.
4. Professional educators will reconceptualize their roles and will become more interested in helping individuals establish themselves in meaningful life activities and less interested in teaching skills and subjects without regard for their relevancy to individuals.

It is thought by many educators that career education can induce the sweeping changes suggested above without a major organizational upheaval. It is felt that if professional educators understand in depth the purposes and intent of career education as well as the operational details of career education programs, they will be able to establish locally oriented programs with little or no additional expenditures for staff or facilities. With thorough understanding of the themes and principles of career education, each teacher, counselor, and librarian can redirect his efforts toward the improvements intended through career education.

State Project to Implement Career Education (S.P.I.C.E.)

The State Project to Implement Career Education (S.P.I.C.E.), a New York State pilot career education program created to spread career education in 14 selected schools in Community School Districts 11, 16, and 31 of the New York City schools, has been orienting and training school personnel since January, 1973.

During the spring of 1973, S.P.I.C.E. sponsored career education orientation workshops for teachers and guidance personnel in the three participating community school districts. The City University of New York, the Fashion Institute of Technology, and the Institute for Educational Development (IED) developed and conducted, in conjunction with the S.P.I.C.E. staff, workshops designed to orient and prepare elementary, junior high and senior high teachers and guidance counselors for career education. Participants from these groups attended monthly sessions and were assisted by the S.P.I.C.E. staff in follow-up activities upon their return to the schools.

In the summer of 1973, IED conducted summer career education workshops wherein teachers, guidance counselors, librarians, and administrators prepared career education curriculum materials which could be used in the fall of 1973. The summer training was, of course, designed to follow up and take full advantage of the orientation given to these participants in the spring.

This book is the product of the senior high school teachers' workshop: career education sample lessons in nine subject areas.

Summer Career Education Workshop

Each of the four groups participating in the summer 1973 workshop had specific objectives as the outcome of their activities:

> Classroom Teachers: The development of career education lessons designed to parallel the basic New York City curriculum. Separate workshops were held for elementary, junior high, and senior high teachers.
>
> Guidance Counselors: The development of a manual describing the roles of guidance personnel in career education programs, career education guidance activities which could be built into the teacher prepared lessons, and career education related guidance lessons which counselors could use in classroom settings.
>
> Librarians: The design of a plan for creating a career education resource center and the development of a bibliography of career education materials for the elementary, junior high, and senior high schools.
>
> Administrators: The preparation of a school plan for disseminating and using the training received and products developed during the summer workshop. All workshop participants (teachers, librarians, counselors, and administrators) from each participating school contributed to the individual school plans.

The workshop participants were members of the faculties of 14 schools designated to pilot career education activities in Districts 11, 16, and 31 of the New York City public schools. In total, over 100 teachers, guidance counselors, librarians, and administrators attended the two week summer session. (Senior high school staff were involved for four weeks.)

Each workshop was led by an experienced career education specialist. Each leader had an assistant who had recently carried out related activities (for example, had taught and/or developed career education curriculum, had created a library resource center in career education, etc.) and a member from the S.P.I.C.E. staff who had intimate knowledge of New York City schools and the work of the participants in the spring.

For a complete list of the participants and administrative staff of the summer workshop, please refer to the list of participants on page vi.

PARALLEL GUIDE TO CAREER EDUCATION

During the summer workshop, teachers from all schools worked together to prepare parallel guides to career education. These guides consist of career education lessons that can be used along with regular curriculum materials. Teachers identified regular curriculum concepts to which career education could be related, determined the career education concepts that related to the usual curriculum concepts, and wrote career education lessons to teach the career education concepts stated. The lessons are not a complete set of career education lessons for any subject area, but rather they are a set of sample lessons illustrating some of the kinds of career education lessons that can be easily incorporated into the program of any teacher.

Writing Career Education Lessons

During the first few days of the summer workshop, the participants were given an intense review of career education including an approach for checking the coverage of career education lessons, an orientation to a format for writing career education lessons, and criteria for judging the quality of career education lessons. Participants then wrote lessons in groups, reviewed and critiqued lessons written by other groups, wrote lessons individually, and rewrote lessons as suggested by interaction with workshop coordinators.

The participants were encouraged to write lessons that would reflect a broad rather than narrow view of career education. While a narrow view of career education would result in lessons relating regular curricular activities only to occupations, participants were encouraged to write lessons relating to eight basic themes of career education.

1. Self-awareness: helping people understand themselves as unique individuals, themselves in relationship to other individuals, themselves in relationship to our society and the societies of other countries, and themselves in relationship to the world of work.

2. Career awareness: helping people understand the totality of the world of work, the opportunities available to them in the world of work, the benefits available from working, the requirements for entering and progressing in the world of work, and the relationship of their working lives to other life roles.

3. Educational awareness: helping individuals understand the role of education in establishing themselves as unique, personally fulfilled and productive individuals.

4. Economic awareness: helping individuals perceive the relationship between his productive and consumptive efforts and the economic system of our country. Also, to help individuals realize the relationship between personal economic planning and satisfying participation in life activities.

5. Decision making skills: helping individuals gain the skills needed to use all available information to set personal goals and plan a program leading to the accomplishment of their goals.

6. Employability skills: helping individuals learn how to enter employment and adjust to their occupational roles.

7. Appreciations and attitudes: helping individuals gain and express feelings toward self, other individuals, and society at-large. The feelings expressed should reflect a personal and consistent set of values.

8. Beginning competencies: helping people gain the skills needed to live personally satisfying lives as well as to participate as a contributing member of society.

Participants were encouraged to classify the objectives of their career education lessons according to the themes and to attempt to achieve a balanced coverage of the themes.

Even though the senior high school teacher workshop was only four weeks long, the participants gained a good deal of skill in writing career education lessons. The lessons in the parallel guide underwent only minor editorial work and appear much as they were written. The quality of the lessons varies, but as a group, the lessons represent a good sample of career education activities.

Using the Parallel Guide to Career Education

The guide provides participants visible evidence of their summer writing efforts and has several interrelated uses:

1. Individual participants can incorporate the lessons or adaptations of the lessons into their programs.

2. Participants can use the lessons to show other staff members in their schools a range of career education activities and to encourage others to use the lessons or to develop their own lessons.

3. Participants can use the lessons to encourage development of quality lessons, particularly career education lessons, by staff members in their schools. Using the lessons as examples, participants can illustrate the process of specifying expected outcomes, designing and specifying activities that may result in the expected outcomes, and evaluating the extent to which the expected outcomes are achieved.

4. The lessons can be used as a basis for cooperative efforts among participants such as counselors, librarians, administrators, and teachers.

5. The lessons can be used as a basis for orienting community members to career education and to the potential interaction between the community and the school in career education.

6. The lessons are the basis from which the participants and others can build and share continually improving career education experiences to meet the needs of all types of individuals found in the schools of New York.

It is the hope of the S.P.I.C.E. staff and the workshop coordinators that this parallel guide will stimulate meaningful discussion and activity around career education concepts in every school currently involved in the program. A larger goal is to stimulate career education activity throughout New York.

This guide has been developed by and for New York City educators. It is the result of an intensive inservice experience that involved all concerned in the career education process.

Replication and dissemination of this material alone will not suffice to spread the growth of career education. Therefore, it is recommended that those wishing to utilize these instructional materials undergo at least orientation to the principles and purposes of career education.

For those intending to write career education units, it is suggested that appropriate steps be taken to develop the technical competencies which have been outlined in this introduction.

John W. Surra
State Program Manager

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Career Education Workshop
Summer, 1973

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ENGLISH

Lesson/Unit Title	Author(s)	No. of Lessons
Effective Communication on the Job	Hedy Geller	2
Communication Skills	Hedy Geller	8
Picture Way to Grammatical Knowledge-Diagramm	Hedy Geller	1
Principles of Composition in a Self Awareness Context	Hedy Geller	7
Gaining Word Power! Vocabulary, Spelling, Usage	Hedy Geller	2
How to Enter the World of Work	Hedy Geller	8
Life's Rhythms	Michael Dunn	1
Life's Main and Subordinate Values	Michael Dunn & Michael Weingarten	1
Standard Language in the World of Work	Michael Dunn	1
Accuracy and Freshness in Communication	Michael Dunn	1
The Art of Combining an Avocation With a Vocation	Fran Briskman	1
The Erne From the Coast - Value Clarification	Michael Weingarten, Hedy Geller, Stanley Solomon	2
Personality Diving	Stanley Solomon	1
Personality Plus and Minus	Stanley Solomon	1
A Closer Look at My Personality	Stanley Solomon	1
Ac-cen-tu-ate The Positive	Stanley Solomon	1
Career Exploration Unit	Stanley Solomon	7

English - Senior High
"Effective Communication on the Job"
Hedy Geller

CURRICULUM CONCEPT:

To understand the principles underlying effective verbal communication*

RELATED CAREER EDUCATION CONCEPT:

To become aware that effective communication is necessary to be productive and successful on the job. (Note: This unit on communications will parallel the world of work course which at this time will be defining work.)

THEMES AND OBJECTIVE:

Themes	Objective
Employability Skills and Skill Competency	Given a situation in which the student presents personal information, the student will demonstrate the principles of effective communication in an introductory speech.

ACTIVITIES FOR SESSION ONE:

Introduction

1. Introduce lesson by putting quote written by John Donne on the blackboard: "No man is an island."
2. Ask students what this quote means to them?
3. Ask students to what extent this quote holds true today.

Tasks

1. After students realize the importance of communication as a result of discussing motivation, ask students to consider the following work situations and discuss:
   a) A doctor not telling his patient what is wrong with him
   b) A lawyer not discussing a case with his client
   c) A job applicant not answering questions during a job interview.
   d) A builder not discussing the steps he will use to build your home
   e) A secretary not speaking when the telephone in her office is picked up by her.
   f) Others to be added by students

---

*The curriculum concept is found in the teacher's notes.

2. Ask students how the World of Work depends on communication?
3. Have students list activities in their personal life which depend on communication.

Summary
After discussing these situations, reinforce idea of importance of communication in personal and professional life. Then elicit from students a definition of communication. (elicit: the process of sending and receiving facts, ideas, feelings and courses of actions.

ACTIVITIES FOR SESSION TWO:

Introduction
Use tape-recorder to tape the following role playing situations to illustrate different communication categories.

Tasks
1. Two students have a face-to-face conversation (one student will be an employer, and the other is the applicant).
2. Have one student speak to class making believe he is a job recruiter based on his research of a particular occupation.
3. Have students simulate telephone conversation; (one conversation ordering a product on phone; second conversation: male student asking a girl for a date).
4. Students will establish the different communication (verbal) categories (1. face-to-face 2. face-to-group 3. ear-to-ear).
5. Students will set up commandments of effective communication. (Elicit: Clarification of ideas, examining true purpose of your communication, consider physical and human setting, consider tone, seek to be understood and to understand - be a good listener.)*
6. Students will participate in communication games to enforce the idea: the power of words to stimulate action
   a) Role-playing
   b) The Domino Game
   c) Listening exercises
7. Students will learn simple formula for effective communication: Who says What to Whom, How, and What Effect.

Summary
Based on our discussion, how can your use of effective communication skills become a human gift? (e.g. responses: Open new and exciting roads in the World of Work, be a valuable employer, advance in your job)

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*From text Effective Communication in Business - Aurner & Wolf

RESOURCES:

Tape-recorder
Book: Communication Games
Library resource center for career education

EVALUATION:

Applying the principles of effective communication have some students in the class introduce themselves while remaining members of class write evaluation of speakers following guidelines set up by class. The introductory talk should include areas like the student's interests, work preferences, participation in civic, professional, social organizations. Assess both oral and written notes on presentation.

English - Senior High
"Communication Skills"
Hedy Celler

CURRICULUM CONCEPT:

To understand that to communicate effectively the student must learn the tools of communication which include grammar, spelling, punctuation, correct usage, and principles of composition. (Note: These skills will be taught in several units on communication skills throughout the term.) *

RELATED CAREER EDUCATION CONCEPT:

To become aware that basic communication skills are necessary in every occupation. To understand that success in the World of Work and improving one's self-image depend on the degree one has mastered the tools of communication. To understand the effect of a student's value structure on his career choice. (Note: These lessons should be taught in conjunction with the World of Work course).

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. The student will describe activities involved in the World of Work where the proper use of the tools of communication are imperative.
Skill Competency	2. Given an office memo, the student will identify language skill errors.
Employability Skills	3. The students will describe the importance of accuracy in business communications.

ACTIVITIES FOR SESSION ONE:

Introduction

1. Using an overhead projector, the students will be asked to evaluate two business letters of application in terms of the effective use of spelling, vocabulary, and proper sentence management. One letter will be perfect and the other letter will include mistakes in all of these areas.
2. Ask students if they were the employer reviewing these letters which person they would grant the interview. Describe intent of unit.

Tasks

After students realize the importance of language skills for their own success, have them take a short verbal aptitude test and diagnostic grammar test to evaluate their strengths and weaknesses in language skill. (This activity will parallel the World of Work class in which they would be taking a battery of tests to evaluate their aptitudes and interests.)

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*The curriculum concept is found in the teacher's notes.

Summary

Ask students why the proper use of language skills is essential in the world of work. (Success on the job - avoid miscommunication).

ACTIVITIES FOR SESSION TWO:

Introduction

1. The students would be given back the diagnostic tests given the day before to help them understand their strengths and weaknesses in the effective use of the tools of communication.
2. Ask students to suggest topics needed for review.

Tasks

1. Based on results of tests administered the day before, give appropriate review in recognition of the sentences and parts of a sentence. This review would be done by having students do the following activities:
   a) Recognition of sentences and fragments. From a worksheet listing groups of words dealing with career concepts, students will indicate which are sentences and which are fragments.
      e.g. 1) Each communication must have a specific purpose
           2) Writing memorandums
           3) Dynamic English gives you power
   b) Students define sentence.
2. After defining parts of a sentence, pick out subject, verb and complements in sentences dealing with career concepts, using the worksheet.
   e.g. a) The business letter has seven main parts.
        b) An outgoing personality is essential for success in business.

Summary

After discussing the job of a copyreader, have students evaluate a written piece of work shown on an overhead projector in term of errors in sentence management.

ACTIVITIES FOR SESSION THREE:

Introduction

The day before the students discussed the job of the copyreader so the newspaper will be used to motivate this lesson.

Tasks

Read articles from the Times on fashion, sports, theatre, current news and editorials.

1. Ask students to identify parts of speech in the lead sentence of each article. (Discuss lead sentence.)
2. Students will be motivated to discuss jobs in the field of journalism. (Supply students with sheets describing the nature of the work, training, qualifications and advancement.)
3. Students do worksheet picking out parts of speech. e.g. of kinds of sentences to be used: Adjectives are used a lot in articles on fashion. Action verbs are used in sport columns.

Summary
Variety is the spice of life. No one likes monotony. How can the proper use of the parts of speech make language more colorful? (e.g. adjectives, pronouns substitute for nouns, action verbs give feeling of activity).

ACTIVITIES FOR SESSION FOUR:

Introduction
How can you compare the business worker to a skilled craftsman? (A skilled craftsman requires the best tools and a business worker requires the best tools of communication.)

Tasks
Based on interviews or research in library's career resource center, students will discuss the language skills involved in different jobs.

Summary
Students will create a chart based on this discussion.

Job	Activities Involving Language Skills
1. Newspaper reporters	1. research - writing stories
2. Copy reader for paper	2. "style" a news story by correcting grammar, punctuation, spelling and paragraphing of writer.
3. Lyricist	3. Writes logical and coherent words to accompany music.
4. Lawyer	4. Writes briefs.
5. Stenographer	5. Transcribes letters, dictation.
6. File Clerk	6. Maintain records, alphabetize files.
7. Claims adjuster	7. Writes report to insurance company which pays claim.
8. Playwright	8. Writes plays.
9. To be added by students	

ACTIVITIES FOR SESSION FIVE:

Introduction
Yesterday we discussed and made a chart of jobs that involve language skills. Tomorrow we are going on a field trip to the New York Times Building to actually observe people doing their jobs which involve the language skills we have discussed in class. Based on the homework assignment, we are going to discuss the kinds of questions you might want to ask on the trip tomorrow.

Tasks
The students will discuss and share some of their responses to the questions in the "rank order" values clarification exercise they did for homework. This exercise included questions of the following types:

1. If I gave you $500, what would you do with it?
   save it_______give it to charity_______buy something for myself_______

2. Where would you rather live?
   on a farm_______in the city_______in the suburbs_______
3. How do you have the most fun?
   alone_______with a large group_______with a few friends_______
4. Which would be your job preference?
   -hard and dirty work at $80/week_______
   -clean and easy work at $40/week_______
   -dirty but easy work at $60/week_______
5. Which would you most like to be?
   -owner of a small business_______
   -employee in a large corporation_______
   -employee in a small business_______

(Note to instructor: These and more of these questions can be found in Values Clarification by Simon Howe, Kirschenbaum-Hart Publishing Company, Inc., New York, 1972. The students use 1,2 and 3 in the blanks next to the questions to rank their responses. Point out the differences that exist among the value structures of the students. Suggest that because people have different values, they will want to ask different questions about the jobs during the trip since they will be seeking different information. Teacher should point out differences but should never judge or evaluate.)

2. Students will participate in a brainstorming session in which they will call out questions they would consider asking an employee while on the field trip. (Note: Point out the need for everyone's contribution because the values clarification exercise has proven that each person may approach a situation from a different perspective. Accurately copy students' questions on board without judging them since this may cause students to question their responses and possibly stifle their imaginative thought process. Do not stop the brainstorming session until it slows down of its own accord.)

Summary
Students will chose ten questions from the blackboard they would most like to ask an employee they will meet on the field trip.

ACTIVITIES FOR SESSION SIX:

Introduction
Remind students of procedure for the field trip to New York Times Building.

Tasks
1. Students take a guided tour through building to observe the different jobs involved in producing a newspaper.
2. Students ask questions they prepared in class the day before.
3. Students list the jobs they observe (e.g. reporter, copy reader, stenographer, secretary, messenger, editors, columnists, etc.) and the activities performed in these jobs that involve language skills.

ACTIVITIES FOR SESSION SEVEN:

Introduction
Ask the students whether they would or would not like to have the jobs they observed during the field trip based on the answers they received to the questions prepared for the field trip.

Tasks
1. Have students discuss the above question by including information on how the jobs measured up to their own values and needs. (Note: Create an atmosphere in which the students' responses are not judged or evaluated but are accepted as important reflections of their own value structures.)
2. Ask students what was the most important factor in their decision to accept or reject a job as a possible career choice.

Summary
Have students write a paragraph demonstrating the effective use of the tools of communication (e.g. grammar, usage, principles of composition, etc.). The paragraph will develop the following topic sentence by facts or examples.

I would like to enter the career of___________________.

I would not like to enter the career of_______________.

Have students fill in the blank with one of the jobs they observed on their field trip. (Note: Encourage students to include information on how the job will measure up to his/her own values and needs.)

RESOURCES:

1. Overhead projector
2. interviews with people in the World of Work
3. library resource center
4. Verbal aptitude tests
5. Newspaper (Times)
6. Grammar Worksheets
7. incorrect office memo
8. field trip to New York Times Building.

EVALUATION AND SESSION EIGHT:

Each student will have to correct an office memo which will contain errors in language skills discussed in the unit. The student will also list three reasons it is important to write business communications accurately. Each student will prepare a brief description of the language skills necessary in the communication activities involved in the job he selected to research. These descriptions will be collated, rexographed, and each student will receive a copy.

English - Senior High
"Picture Way to Grammatical Knowledge - Diagramming on the Job"
Hedy Geller

CURRICULUM CONCEPT:

To diagram draw a map of the grammatical structure of a sentence. To be aware of how this enhances ones understanding of grammar which is essential to oral and written communication*

RELATED CAREER EDUCATION CONCEPT:

To be aware that a thorough understanding of grammar is essential to effective oral and written communication which is needed to be successful in the World of Work. To be aware that to communicate effectively helps build one's self-respect and self-image. (Note: This lesson parallels the World of Work and Social Studies classes).

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. The students will identify which workers need maps, drawings, and blueprints to function effectively on the job.
Career Awareness	2. The students will describe the uses of maps, drawings, and blueprints in the World of Work.
Skill Competency	3. The students will create and diagram simple sentences involving the information they gathered in their occupational research.

ACTIVITIES:

Introduction

Say to students:

1. "Make believe you come from a foreign country to New York City and you want to find your way in the city." (e.g. You want to locate the Garment Center - 7th Avenue between 23rd and 34th Streets -, or the financial area - Wall Street).
2. What would you use to find your way in the city? Elicit the idea of a map. Show students map of New York. Discuss intent of lesson.

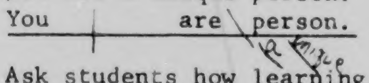
---

*The curriculum concept is found in the teacher's notes.

"Picture Way to Grammatical Knowledge - Diagramming on the Job"

Tasks

1. Ask students to discuss other uses for maps other than locating geographical areas. (Note: This will parallel what they learned in social studies the first week of term). Elicit: Space exploration, aerial travel, weather prediction, agriculture.
2. Based on the students' occupational research which involved interviews and the use of library's resource center (Occupational Outlook Handbook), ask students about the use of aids similar to the map which include drawings and blueprints. (Show a mechanical drawing and blueprint).
3. Ask students which job sinvolve the use of these aids (e.g. architect, engineer, city planners, contruction workers, etc.)
4. On overhead projector diagram the following sentence:
   You are a unique person.



5. Ask students how learning to diagram is like learning to draw a map of the structure of a sentence.
6. Ask students why understanding the structure of a sentence will help them in their oral and written communication. Ask students why this is important in business (Note: Since this lesson is a review of diagramming the simple sentence, review with students the position of parts of a sentence on a diagram.)
7. Give a worksheet to students and have each student diagram the following sentences:
   a) Power and money are human drives.
   b) The resume lists the significant details of your personal life.
   c) Completeness in communication is the union of clearness and accuracy.
   d) Proper manners and appearance are very important for successful job interviews.

Summary

Write 5 simple sentences about yourself and diagram each word in the sentence. (Note: This will parallel World of Work class where students are involved in a unit on self-awareness.)

RESOURCES:

1. Overhead Projector
2. Map of New York City
3. Blueprint
4. Mechanical drawing

EVALUATION:

Based on the students' research on jobs involving the use of maps, drawings and blueprints, they will create simple sentences from their occupational research and will diagram them. These sentences will identify types of workers and their use of maps, diagrams and/or blueprints.

English - Senior High
"Principles of Composition in a Self-Awareness Context"
Hedy Geller

CURRICULUM CONCEPT:

To become aware that skills in the principles of composition that are essential for effective written communication. To understand that self-awareness enhances one's ability to communicate effectively.*

RELATED CAREER EDUCATION CONCEPT:

To become aware that in the world of work it is necessary to express one's thoughts accurately, coherently and effectively. Workers are involved in written activities which include reports, memos, records, journals, analyses, orders, résumés, letters of application, etc.

To gain an understanding of oneself to enhance one's ability to communicate. As one learns to communicate facts, ideas and opinions more effectively on his job, he gains greater self-respect and more of a self-image.

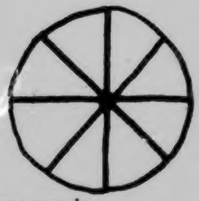
THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency and Self-Awareness	Given a choice of topic sentences dealing with self awareness theme, the student will demonstrate skills in using the principles of effective composition writing by preparing a paragraph developed by facts or examples.

ACTIVITIES FOR SESSION ONE:

Introduction

Draw a wheel on an overhead projector:



Ask students how they can liken a wheel to a paragraph:
a) each spoke of wheel = supporting sentences
b) hub of wheel (center of motion) = topic sentence (controlling idea of paragraph)

---

* The curruculum concept is based on the teacher's notes.

c) rim of wheel = clincher sentence (restatement of topic sentence = summary)

Tasks

1. Ask students to define paragraph. (elicit: A paragraph is a group of sentences which support and expand one main idea - (topic sentence).
2. Using an overhead projector show the following paragraph: "Words are the basic tools for a salesman. The more words he understands and is able to apply, the greater will be his ability to express ideas, selling features, and sales facts. Words help the salesman paint mental pictures to give prospects a feeling for the salesman's proposition. A good salesman can, by using words creatively, get the prospect literally to feel that he already owns the product. The salesman uses words with the same pride and satisfaction that a skilled craftsman uses tools." (Note: this paragraph is from the text - Salesmanship Fundamentals - 3rd ed. McGraw-Hill, 1965).

   Ask students to pick out topic sentence, supporting sentences, and clincher sentence from above paragraph.
3. Based on this paragraph, ask students how their skill in writing can help build up self-respect and gain the respect of co-workers, employers and clients.

Summary

Students will comment on the following statement: "Words when unified into a complete message are the equivalent of power." (Text: source not available)
Elicit from the students - be more effective on job, prevent miscommunication, etc.

ACTIVITIES FOR SESSION TWO:

Introduction

Read paragraphs from feature articles in the U.S. News and World Report, Consumer Affairs, and Wall Street Journal. Ask students to select the topic sentence in each paragraph.

Tasks

1. Ask students how the topic sentence in each paragraph was developed.
2. Ask students the different ways a topic sentence can be developed. Elicit: facts, examples, incident, arguments, comparison and contrast, definition, combination of these methods.
3. Give students magazines and newspapers (business publications) and students select paragraphs to illustrate the various ways topic sentences can be developed.

Summary

The students will use overhead projector to discuss the development involved in the paragraphs they selected from business publications. (They are to point out the topic sentence, means of development, and clincher sentence).

ACTIVITIES FOR SESSION THREE:

Introduction

Play a tape of an effective speech. Ask students the qualities of an effective speaker. Elicit: accurate, coherent, articulate.

Tasks

1. Ask students which of these qualities are associated with effective writing. (all)
2. Ask students how these qualities can be achieved. Elicit: omit irrelevant material, arranging details in a paragraph in a clear and logical order, use of transitional devices - linking expressions and connectives.
3. Using the overhead projector, show 4 paragraphs illustrating the 4 basic ways to arrange details.
   a) Chronological order - use paragraph dealing with lifestyle.
   b) Spatial order - use paragraph describing a factory
   c) Details in order of importance - use paragraph giving reasons for a particular job selection
   d) Comparison and Contrast - use paragraph giving advantages and disadvantages of working part-time while in school.

   Ask students the method of arrangement in each paragraph.
4. Ask students to list transitional devices used to strengthen coherence in the paragraphs. Elicit: pronouns, words like - above, first, on the contrary, for example, furthermore, consequently, etc.

Summary

"It is said that employers who receive many applications run through them as you would a deck of cards. What can you do to convince him to pull your letter out of a deck and grant you an interview?" (Text: source not available) Elicit: Write a well-unified, coherent, accurate letter emphasizing what you have to offer him.

ACTIVITIES FOR SESSION FOUR:

(Note: On day 4 of this unit, it would be appropriate to have students view a film or filmstrip summarizing and reinforcing the concepts of effective written communication discussed in class. Preview before showing to class.)

Introduction

Students will see a film or filmstrip reinforcing concepts discussed on effective written communication.

Tasks

1. Students will discuss the concepts presented in the film or filmstrip on effective written communication.
2. Students will create a checklist for effective written communication.
   Checklist for Effective Written Communication:
   a) Accuracy
   b) Coherency
   c) Unity
   d) To be added by students

"Principles of Composition in a Self-Awareness Context"

Summary

What writing activities are involved in the World of Work which will utilize the principles of effective written communication? Elicit: records, journals, reports, memos, analyses, orders, business publications, résumés, letters of application, etc.

ACTIVITIES FOR SESSION FIVE:

(Note: This lesson will involve team teaching with the World of Work instructor who will be completing a unit on self-awareness)

Introduction

The World of Work teacher will ask students what they have learned about themselves as a result of taking and receiving the results of a battery of tests (verbal, computational,psychological, interest surveys). Discuss purpose of today's lesson.

Tasks

1. Students will list the areas of their lives covered in these tests.
2. The students will listen to the poem "Autobiography" by Lawrence Ferlinghetti. (Each student will have a copy)
3. Students will discuss the meaning of autobiography based on listening of poem and reading of an autobiography of a successful person in business. (Assigned as collateral reading).
4. Ask students what areas of life are covered in the poem? e.g. childhood, job, future plans, etc.
5. Ask students what impression they got of the narrator of the poem?--lazy? depressed? ambitious?
6. Ask students how an autobiographical sketch can be a means to self-appraise themselves.

Summary

Ask students why it is important for them to understand themselves when entering the world of work? Knowing oneself will help in decision-making job selection, knowing oneself will help to sell oneself more effectively. Ask students how a letter of application for a job depends on one's self-appraisal?

ACTIVITIES FOR SESSION SIX:

Introduction

Using an overhead projector, students will look at a résumé and letter of application. Discuss intent of lesson.

Tasks

Students will discuss what they have to know about themselves to successfully enter the world of work in terms of decision making and proper application of effective communication principles for résumés and letters of application.

Summary

Students will create a self-appraisal check list which will include their personal history, educational background, work experience, interests (school, vocational, social) strong and weak points.

RESOURCES FOR SESSIONS ONE THROUGH SIX:

1. Overhead projector
2. Library's Resource Center for Career Education
3. Business publications: U.S. News & World Report, Consumer Affairs, Wall Street Journal
4. Tape of an effective speech
5. Team-teaching--World of Work teacher
6. Model letter of application and model résumé
7. Copies of poem "Autobiography"
8. Filmstrip dealing with concepts of effective communication

EVALUATION AND SESSION SEVEN:

Students will write a well developed, coherent and unified paragraph (developed by facts or examples) using the guidelines for effective written communication needed for success in the world of work. The students will select one topic sentence to develop. The choice of topic sentences will deal with self-awareness concepts. These paragraphs will be collected, graded, and returned to students. Topic sentences:

1) My ideal career_______________.
2) I want to be a_________________.
3) I want to be a worthwhile member of society.
4) If I had to live my life again, I would never____________________.
5) I am an (ambitious, lazy, highly motivated, concerned) individual. (select one)
6) Understanding myself is essential to selecting a career.

English - Senior High
"Gaining Word Power: Vocabulary, Spelling, Usage"
Hedy Geller

CURRICULUM CONCEPT:

To become aware that proper use of words (vocabulary, spelling, correct usage) helps one become a more effective communicator.*

RELATED CAREER EDUCATION CONCEPT:

To become aware that spelling, vocabulary, and correct usage are entry level skills needed to enter the world of work. Proficiency in these skills are needed to be successful on Civil Service Exams, on the job, and in written and oral communication. (Note to instructor: These two lessons serve as an introduction to the teaching of vocabulary, spelling and word usage which is taught throughout the entire term. Thus, these two lessons alert the students to the importance of these skills for their personal life and the world of work. Following these two lessons will be a list of suggested activities that can be used to teach spelling, vocabulary, and correct usage during an entire term. The selection of the words to be covered in a term is up to the discretion of the instructor. These two lessons serve as an introduction to the teaching of vocabulary, spelling and correct usage of words found in the sections of the required texts for 9th grade: Warriners (pluralization of nouns) and World Wealth (Part I, units 7-12); lists of commonly misspelled words; lists of spelling and vocabulary words that often appear on Civil Service Exams and tests given job applicants by large companies. Note: Lists will be taken from Business English in Communications by Himstreet, Porter and Maxwell-Prentice-Hall, 2nd Edition, 1970; lists of homonyms (correct usage); vocabulary and spelling words supplied by World of Work teacher.)

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness and Skill Competency	Given tests using the Civil Service Exam formats and formats used in tests given to job applicants by companies in the areas of spelling, vocabulary, and word usage, the student will demonstrate proficiency in the use of these skills.

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*The curriculum concept on which these lessons are based is found in the textbook: Business English and Communication, 4th Edition by Hewart, Lanham, Zimmer, and Clark; McGraw Hill, 1972

"Gaining Word Power: Vocabulary, Spelling, Usage"

ACTIVITIES OF SESSION ONE:

Introduction

Have students consider the following situations:

1) A typist was asked to type a report in triplicate. She prepared an original and one carbon copy.
2) A stenographer's transcript contained the phrase: "seperate acomodations"
3) A person applying for a job interview wrote "repectively yours" in the letter.

Describe purpose of today's lesson.

Tasks

1. Ask students what communication skills the typist was deficient in (elicit: vocabulary), the stenographer (elicit: spelling), the job applicant (elicit: usage).
2. Ask students how skill in the use of words represents power for an individual in his personal life and in his job? (elicit: power to influence others, express facts, opinions, ideas)
3. Ask students to write a check list of ways to improve their vocabulary. This list should include the following:
   a) Be word-conscious - alert to new and unfamiliar words found in speeches, T.V., radio, newspapers, literature, magazines, etc.
   b) Try to find meaning from context
   c) Using the dictionary
   d) Be aware that English is a living language which is constantly changing e.g. new inventions and discoveries, borrowing from other languages, etc.
   e) Using the thesaurus. (Note: give handout of a page of a thesaurus)
   f) Be aware that words drop from our working vocabulary because they no longer apply to modern society. e.g. we no longer sign business letters, "Your obedient servant."
4. Ask students why the dictionary can be considered the most important tool of the communicator. Elicit: gives more information about words than any other reference: spelling, pronunciation, syllabication, origin, parts of speech.
5. Based on a library lesson on dictionaries (types, information, etc.), ask students what supplementary information provided by various dictionaries is helpful in the world of work. Elicit: vocabulary of abbreviations--example: F.H.A. = Federal Housing Administration--pronunciation of foreign places and names, biographical names, pronunciation and information rules for spelling and mechanics, proof-readers' marks, etc.
6. Students will examine and discuss representative pages from two dictionaries illustrating some information available in a dictionary, (attached to lessons)
7. Ask students how a good vocabulary can influence one's proficiency in spelling and word selection.

Summary

1. Ideas in the world of work are useless unless they can be shared and put to work.
2. How can this be accomplished? (Selection of appropriate words for purpose and audience, correct spelling and usage).

ACTIVITIES OF SESSION TWO:

Introduction

Describe the purpose of todays lessons - the taking of tests.
Discuss the value of this task.

Tasks

1. Students will take a brief diagnostic spelling, vocabulary, and word usage test based on formats used in Civil Service Exams, and other tests for job applicants. (Note: Check Burrows Handbook of Mental Measurement, Civil Service Exams, company tests). The following are examples of some of these formats.(E.g. Synonyms: File Clerk, Civil Service Exam)

   Select the word that means most nearly the same as the capitalized word.
   a) Adapt: 1) make suitable 2) advise 3) propose 4) do away with
   b) Authority: 1) attorney 2) author 3) power 4) a port
   c) Scrutinize: 1) reject 2) examine 3) bring about 4) insist
2. Provide a spelling question: Parking Enforcement Agent. Write down the correct spelling next to words that are misspelled.
   a) directary.__________________
   b) recognize__________________
   c) bankruptsy__________________
   d) sincerely__________________
   e) desision__________________
3. After taking brief diagnostic tests, students will correct tests to evaluate their strengths and weaknesses in vocabulary, spelling, and usage.

Summary

Ask students what aspects of their entry into the world of work will depend on their proficiency in vocabulary, spelling and usage--interviews, Civil Service Exams, Company Exams, letters of application, etc.

Supplementary Activities

The following list of activities are suggestions for teaching, spelling, vocabulary and usage during an entire term.

1. Students will participate in quick spelling bees during the week.
2. Students will correct errors in spelling, vocabulary, and usage found in memos, application blanks or business letters provided by teacher. (Students will receive study lists of words covered for a particular day).
3. Students after studying spelling lists, will take dictation for a business letter or memo to reinforce correct spelling.
4. Students will participate in role playing situations to reinforce correct use of words (e.g. interview).

RESOURCES:

1. Copies of representative dictionary pages.
2. Copies of representative page of a thesaurus.

3. Copies of diagnostic spelling, vocabulary and usage, and post tests using Civil Service Exam format and formats of company tests.
4. Copies of memos, business letters, application blanks containing errors in spelling, vocabulary and usage.

EVALUATION:

Students will be tested on vocabulary, spelling, and usage taught at different intervals of the term by taking exams using formats used on Civil Service Exams and tests given to job applicants by companies.

English - Senior High
"How to Enter the World of Work"
Hedy Geller

CURRICULUM CONCEPT:

To become aware of the guidelines for effective oral and written communications needed for the writing of a resume, letter of application and taking the interview.*

RELATED CAREER EDUCATION CONCEPT:

To understand that to enter the World of Work the student must learn to sell his services effectively through oral and written communication. Success in getting a job depends on knowing how to write an effective resume and letter of application and knowing how to conduct oneself during an interview.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency and Employability Skills	1. Given a want ad, the student will demonstrate his/her knowledge and skill in writing an effective resume and letter of application applying for the part-time job advertised.
Skill Competency and Employability Skills	2. Given case studies of interviews, student will evaluate them according to guidelines set up for effective interview techniques.

Note to instructor:
This unit will parallel a unit being taught in the World of Work class on "Getting the Job". The World of Work teacher will cover job sources, the application blank and areas of the interview. In this unit the English teacher will cover the resume, the letter of application and areas of the interview. The areas of the interview will be taught with a team-teaching approach.

ACTIVITIES FOR SESSION ONE:

Introduction
The good writer "climbs into the envelope and seals the flap." Ask students to what extent this is humanly possible.

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*The curriculum concept is found in the teacher's notes.

"How to Enter the World of Work"

Ask students what this quote means in terms of being an effective business communicator? (Elicit: The aim of the effective business communicator is to make his words bring himself and the recipient of the message together.)

Tasks

1. Involve student in a role playing situation in which they act as the employer of Omnibus Company who receives three letters of application for a job. Have them evaluate the body of the three letters and decide which applicant is the most effective communicator. (Note: These three examples are included in this lesson.) Elicit: example A--deficient tone, organization; example B--egotistical tone; example C--proper tone and unified purpose.)
2. Have students create a checklist listing guidelines for effective written communication. Be sure the following ideas are included:
   a) Use a positive tone to create good human relations with recipient of your communication (e.g. be sincere, courteous, willing to serve).
   b) Avoid a distant, impersonal, negative tone.
   c) Have a unified purpose.
   d) Have a powerful opening and close. (Give examples)
   e) Be accurate, clear, and concise in your writing.
   f) Consider the needs of the recipient of the message. ("You" attitude.)

Summary

How can being an effective communicator increase your chances of getting employment?

ACTIVITIES FOR SESSION TWO:

Introduction

(Note: Use role playing and fish bowl technique for this motivation.) Have several students in the class sell the same product to other members in the class who will pose as consumers.

Tasks

1. Have students define commodity.
2. Have students discuss the role playing situation they were involved in--in terms of which student (salesman) was the most effective in selling his/her commodity.
3. Have students discuss what a salesman must know to sell a product. (Elicit: its uses and values to consumer)
4. Ask students what they must know about themselves before selling their own services. (Elicit: Students must do a self-appraisal in terms of ambitions, skills, personality, credentials, work and educational experience.) (Note: This self-appraisal will be covered in World of Work and English class before this unit so students will have some degree of understanding about themselves.)

Summary

Have students discuss the following: "It is important to ask not what the prospective employer can do for you but what you can do for the prospective employer."

ACTIVITIES FOR SESSION THREE:

Introduction

Earlier this term you did a self-analysis in both your World of Work class and English class. You also discussed values in these classes in addition to your social studies class. Assume you saw the following want ad in the classified section of a newspaper:

Part Time
H.S. students for machine-shop job in Fix-It shop
$1.85 hour. Apply to Mr. Fred Jones
Jones Fix-It Shop
430 Flatbush Avenue, Brooklyn, N.Y. 11226

and you were interested in applying for the position. How would the knowledge you have of yourself assist you in the written communications needed to apply for the job? (Elicit: résumé, letter of application.)

Tasks

1. Ask students what information should be included on a data sheet (résumé) which is attached to the letter of application. (Elicit: personal information, educational background, work experience, extra curricular activities, interests, references) (Note: discuss who would be used as references.)
2. Have students write up an original résumé based on the areas the class considered important enough to be included in a résumé.

Summary

1. Give students a copy of an acceptable résumé format which they will use to evaluate and correct the original résumés they have written during the lesson.
2. Ask students what advantages and purposes the résume serves for both the applicant and employer reviewing it? (Elicit: conserves time for employer who can quickly scan résume to get a logical picture of applicant in a well tabulated outline form which stresses points worthy of mention.)

ACTIVITIES FOR SESSION FOUR:

Introduction

"It is said that employers who receive many letters of applications run through them as you would a deck of cards." What can you do to convince him to pull your letter out of the deck and grant you an interview? (Elicit: a) Use attractive, logical, correct format of the letter of application, b) Impress him how you can satisfy the needs of his company.)

Tasks

1. Based on students' assignment to read about the letter of application, ask students what is the "blueprint" of an effective letter of application.
   a) Heading
   b) Inside address
   c) Salutation
   d) Body
   e) Complimentary close
   f) Signature
   Note: Students will define each term.
2. Ask students what a business letter must include to become a letter of application. Elicit:
   a) A direct application for the position.
   b) Pertinent information about applicant's background.
      (Note: if resume is attached don't have to go into great detail.)
   c) Contains information about applicant's training.
   d) Asks for interview and gives applicant's telephone number.
3. Have students review the guidelines they set up for effective written communication in lesson 1. of this unit and add the following to the checklist:
   a) Type unless specified to write.
   b) Avoid typing, usage, punctuation and grammatical errors.
   c) Use Monarch or letter size paper.
   d) Try to use name of person for salutation.
4. Have students define the following terms:
   a) Close punctuation
   b) Open punctuation
   c) Job reference
   d) Block style
   e) Modified block style
   (Note: show examples of different forms)

Summary

Based on the lesson, ask students what "ingredients" a letter of application needs to convince a prospective employer to grant them an interview.

ACTIVITIES FOR SESSION FIVE:

Introduction

Using an overhead projector show a letter of application which does not include any punctuation marks.

Tasks

1. Have students insert all marks of punctuation in this letter.
2. Have students check their punctuation insertions against a model of this letter. (Note: discuss use of colon, comma, etc.)
3. Have students write a letter (using block style) from dictation based on the want ad and resume discussed in a previous lesson of this unit.
4. Have them next address envelope for this letter.

"How to Enter the World of Work"

Summary

Students will correct the letter they wrote from dictation against the model of this letter which they will view on an overhead projector. (Note: letter is attached.)

ACTIVITIES FOR SESSION SIX:

Note: This lesson follows the lessons on how to arrange for the interview. This lesson will use a team-teaching approach involving the English teacher and World of Work teacher.

Introduction

World of Work teacher and English teacher will role play in a "How Not to Do It" interview. (Note: This interview is attached to this lesson)

Tasks

1. Have students listen to interview and prepare a list of Don'ts for a job interview, (e.g. don't emphasize your need for job, don't ask about salary, don't walk in as if you were on a Sunday afternoon stroll, don't use slang, don't talk about irrelevant material, etc.)
2. Have students discuss what they think employers look for during an interview. (Elicit: personal interests and activities, personal self-expression, manners, personality and character traits, personal appearance, past work experience, scholastic record, interest in opportunity and responsibility that job offers,necessary papers completely and neatly filled out.)
3. Ask students what they think employers look for during interview in personal self-expression of applicant. (Note: This list taken from Occupational Essentials, Johnson Press, 1973.) Elicit:
   Personal self-expression
   a) Able to think and speak clearly.
   b) Expression of confidence in speech.
   c) A good speaking voice using good grammar and good diction.
   d) Ask intelligent questions about prospective company and prospective job.
   e) Responds with interest and truthfulness to questions asked.
   f) Sense of mature career planning--knowledge of goals, plans, ambitions, etc.
   g) Sense of preparation--knowing what you want to say and have some knowledge about company.
   h) Let interviewer lead discussion--don't interrupt.
   i) Able to speak freely, distinctly, positively and to the point.
   j) Able to avoid phrases like "Give me the job and you'll never regret it."; "Take me and your worries are over."
   k) Able to introduce yourself telling briefly who you are and job you are applying for. (Don't call yourself "Mr." or "Mrs.")
   l) Able to courteously end interview by thanking interviewer.

(Note: Other areas of the interview will be discussed under the guidance of the World of Work teacher--e.g. questions asked during the interview.)

Summary
Have students write up a list of Do's For a Job Interview covering all aspects of the actual interview discussed.

ACTIVITIES FOR SESSION SEVEN:

(Note: World of Work teacher will have some students role play a "How to Do It" interview while other students evaluate it according to checklist developed the day before.)

Introduction
1. In the English class, the teacher will say the following: "Job interviewing is similar to winning a ball game."
2. Ask students to comment on this. (Elicit: Both require planning your plays in advance.)

Tasks
Ask students what they think they must do after an interview.
Elicit:
a) Write a thank-you letter to employer (Note: show students a sample letter.)
b) Write a thank-you letter to references.
c) Others to be added by students.

Summary
Students will comment on following concept: "In the business world the process of interviewing never stops." (Note: Students will review the importance of proper interviewing techniques.)

RESOURCES:

Copies of model letters of application.
Copies of model résumés.
Want ads.
Envelopes and paper to write letters.
Team teaching--World of Work teacher.

EVALUATION--ACTIVITIES FOR SESSION EIGHT:

In English class students will demonstrate their skills and knowledge in writing an effective résumé and letter of application for a part-time job advertised in a want ad they bring to class. (They will be graded on these activities. The evaluation for the interview will be set up by the World of Work teacher. Suggested: Students will evaluate case studies of interviews according to guidelines set up for effective interview techniques.)

EXAMPLE A

Please consider this to be an application for employment with your company. I know that you receive many messages similar to this, but I hope that you may be interested in the qualifications that I have to offer. Yes, this is another request for a job. Considering the recent expansion of your organization, I thought that you might have a place for some new personnel.

I am only 21 years of age. If I pass my final exams this semester, however, I should receive my BBA degree from Arista University this June. Although I have had only part-time selling experience in the campus book store, I am very much interested in your executive trainee program of which I have heard glowing reports from a couple of friends and a professor who owns stock in your company. His name is Dr. Walter Robinson. Maybe you know him. He said that he met you at an alumni reception on campus two or three weeks ago.

My health is good in spite of the climate here, and one of the reasons that I want to work for Omnibus is because I understand that your branch office is at Sol, California, where I would like very much to be. I am industrious, as Dr. Robinson can prove, because during the few days when we have had sunshine here, I have worked hard on assignments for his class. He is a very good professor, but it is hard to pass his course, which I finally did last semester. I have made B's in several courses, however.

My data sheet is attached, and it certainly would be appreciated if you were to give me the privilege and the opportunity of a chance to interview you.

EXAMPLE B

I am certain that you ought to remember Walt Robinson, who is a professor at Arista University from which I'll get my BBA this June. I was told by Walt the other day that your company is looking for men like me.

I've worked some as a salesman in the campus book store, and I have decided that Omnibus offers a good executive training program compared to what other companies have.

Needless to say, I think that you need people who can get along with people, and I'm one of them. I know that Dr. Robinson will say so if you write him.

How about an interview? My number is 633-4901.

Data sheet enclosed. I'm 21, by the way, healthy and strong.

EXAMPLE C

Your Omnibus expansion program has earned the congratulations of business experts and the trust of those who are about to begin their business careers. But surely expansion creates programs--especially for personnel managers. Your increasing sales and operations probably require additional employees whose education and experience would be useful to you now and in the future.

Enclosed is my resume, I am anticipating award of a Bachelor of Business Administration degree from Arista University this June and would gladly join my future with that of Omnibus. My academic transcript, work record (including sales experience), and personal references are available to you. I will welcome the opportunity of meeting you and of serving Omnibus.

Please write or telephone me (633-4900), at your convenience, for an interview.

The above material was taken from Effective Communication in Business by Aurner & Wolf (5th ed., South-Western Publishing Co., 1967).

Résumé

Name: Bill Smith

Address: 2431 Lenox Road
Brooklyn, New York 11209

Telephone Number: 276-4882

Age: 16 Height: 5'9" Weight: 120 lbs.

Social Security Number: 479-16-7128

Education: Erasmus Hall High School
Entered September 1973
General curriculum with electives in shop and drafting

Projected Career Goal: Upon graduation from Erasmus, I plan to get a job as appliance repairman.

Previous Employment: Summer of 1972 assisted in Fix-It Shop, 2360 Kings Highway, operated by Mr. John Jones.
Since close of football season have been working on Saturdays at Gasso filling station on 20 Lenox Road.

Special Abilities and Skills: Safety conscious, able to work with tools, familiarity with repair manuals, ability to read blueprints.

Extracurricular Activities: Guard on football team
Glee Club
Member of Junior Academy of Science
Member of Honor Society in junior high school

Hobbies: Fixing clocks and cars
Reading

References: Mr. T. M. Smith
Grade Advisor, Erasmus High School
911 Flatbush Avenue
Brooklyn, New York 11226

Mr. John Jones
Owner, Fix-It Shop
2320 Lenox Road
Brooklyn, New York 11203

The Reverend Arvene Smith
First Presbyterian Church
1800 Albany Avenue
Brooklyn, New York 11202

Letter

2431 Lenox Road
Brooklyn, New York 11209
September 30, 1973

Mr. Fred Jones
Jones Fix-It Shop
930 Flatbush Avenue
Brooklyn, New York 11226

Dear Mr. Jones:

Thank you for the opportunity to apply for the machine-shop job advertised in the September 29th issue of The Times.

I am enclosing a résumé of my qualifications. You will note I have already had some experience along mechanical lines, and I am eager to have the opportunity to learn more. I read Popular Mechanics every month and have a workshop at home where I experiment with mechanical gadgets. I also am taking elective courses in shop and drafting.

For further information about my character, personality, and other qualifications, you may write or call the persons whom I have listed as references on the résumé.

I would appreciate the opportunity of coming to see you and learning more about the job. I can be reached at 276-4882. I am usually home from school by 2:00.

Sincerely yours,

Bill Smith

"How Not to Do It" Interview

(From Occupational Essentials, Johnson Press, 1973)

John Smith: "You the guy they told me to see about a job here?"

Mr. Davis: "I don't know if I'm the person you are supposed to see or not, but my name is John Davis. May I help you?"

John: "Yeah, here are some papers they told me to give you."

Davis: (Going through the papers.) "It's beginning to get warm out there, isn't it?"

John: "Yeah."

Davis: "I see you're from West-Town."

John: (No response.)

Davis: "Did you use the Lincoln Drive?"

John: "Huh?"

Davis: "I said, did you drive in on the South Expressway?"

John: "Oh, yeah."

Davis: "That's quite an expressway. If it gets more complicated, I'll need a radar fix to find my way home. I live in Dover."

John: (No response.)

Davis: "Are our Blue Devils going to win the championship this summer?"

John: "I don't know."

Davis: "Let's see, your name is John Smith? Well, John, just what kind of job are you interested in?"

John: "Well, I don't know, ah, ah, something here in the plant. What do you have?"

Davis: "As you know our company is large and operates in a wide range of fields. I assume you are familiar to some degree with our company? In what area do you have specific training?"

John: "Ah, well, I don't know exactly, but I've done several things. Ah, I just want a job, just something I can make pretty good money at or something to get started on. I'll take any job. I'm willing to, you know, try anything as long as I can do it. They told me you were hiring and I thought I'd see what you had--thought maybe I could get a job."

Davis: "Yes, well, I need to know something about your experience and interest."

John: "You hired a friend of mine, and he lives out there with me, and we went to school together."

Davis: "Can you tell me what work experience you've had?"

John: "I was in the Navy, the United States Navy, and they told me what I did would get me a job when I got out, but before, I worked at a steel plant. That was one summer, and I quit that or they cut back and laid some of us off, it was summer work anyway, just for the summer. And, ah, after that, I went to the Navy--ah, no, before that or before I went in, I got a part-time job at one of the stores in, ah, oh, out in that place near the airport."

Davis: "Country Town?"

John: "Yeah, no, it was out there, ah, ah."

Davis: "Lambert?"

John: "Yeah, I think so. I forget what the name of the place was. It was right next to that new store out there."

Davis: "I see. Would you describe your educational background?"

John: "I took a course in the Navy when I was in Florida, and I put--ah, you know--these things on a board in a certain order, it was one of these, ah, wiring courses."

Davis: "Electronics?"

John: "Huh?"

Davis: "Was it electronics?"

John: "No."

Davis: "High school?"

John: "No."

Davis: "You haven't any?"

John: "No."

Davis: "Not any?"

John: "No."

Davis: "Elementary school?"

John: "Yeah"

Davis: "How much?"

John: "You mean years?"

Davis: "Yes."

John: "Ah eight, yeah, eight years."

Davis: "Did you graduate?"

John: "From elementary school?"

Davis: "Yes."

John: "Yeah." (Pause) "Ah, what does this job pay?"

Davis: "The salary varies depending on experience, education and training. Well, why don't I keep your application here and if anything comes up, we'll call you."

John: "Ah, yeah, OK."

English - Grades 9-10
"Life's Rhythms"
Michael Dunn

CURRICULUM CONCEPT:

To describe meter and rhythm in poetry*

RELATED CAREER EDUCATION CONCEPT:

To understand that a regular rhythm prevails in life's activities and in the cycle of nature.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. The student will list areas of life in which rhythm plays a part.
Career Awareness	2. The student will define rhythm in different occupations.
Attitudes and Appreciations	3. The student will explain how rhythm plays a part in nature.
Educational Awareness	4. The student will describe and provide examples of rhythm in music and art.

ACTIVITIES:

Introduction
Write first verse of "America" on board. Establish by singing it, beating it, conducting it, the 3/4 time (musical).

Tasks
1. Elicit word "rhythm" from above and define it. Exemplify that rhythm is change; Rise and fall, in and out, across and back, etc. Use names of students, written on board, to show rhythm in naming, consciousness of parts of this rhythm, (e.g. Ē liź ă bĕth Jońes, Mélănĭĕ Jăcóbsĕn).
2. Establish rhythmof "America" (poetic) by trying iambic, trochaic, dactylic, anapestic; then show that line of poetry is in regular rhythm.
3. Examples of other kinds of meter; introduce terms for number of feet in a line; define poetry as involving number of certain kinds of feet.

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*The curriculum concept is found in the teacher's notes.

4. Introduce "regular thythm" concept into Music and Art, and relate these to math and art.
   Music: is always in two beats or three beats; phrases are usually four measures or eight measures; music is made of recurring themes; styles of music occur in cycles similar to life cycles.
   Art: themes and styles recur as in music; there is a rhythm of line and color in some work; frames of comics are done with a rhythm in mind.
5. Relate concept of rhythm to life:
   a) What kind of rhythm do we show in our daily life? (Elicit "routine" and discuss various routines everyone pursues, need for routines).
   b) How are you dependent on someone else's routines? (Clocks, dancing, all "ensemble" work on the job and at play).
   c) How did clocks evolve? (revolutions of earth) Show model of solar system.
   d) What other rhythms in nature are you aware of? (Seasons, water flow, cycles of life, etc.)
   e) What rhythm is most vital to your life? (heartbeat - rhythm keeps you alive).

Summary

Regular rhythm is an important component of poetry, music and art, and life.

RESOURCES:

Model of solar system (not essential)
Model or example of any machine that performs job in a continuous cycle of operation.

EVALUATION:

Design item that tests career objectives. For example,
Students:
1. List kinds of poetic foot and number of feet.
2. Name ways that routine enters their lives.
3. Tell how the success of any given operation depends on how routines are synchronized.

English - Grades 9-10
"Life's Main and Subordinate Values"
Michael Dunn and Michael Weingarten

CURRICULUM CONCEPT:

To describe "main" and "subordinate" values in English grammar*

RELATED CAREER EDUCATION CONCEPT:

To realize that based on decision making process, life is full of "main" and "subordinate" values, and people must categorize according to what is important to them.

To understand that in a given situation a person has "main" and "subordinate" values that affect his decisions.

THEMES AND OBJECTIVES

Themes	Objectives
Educational Awareness	1. Students will describe how "subordination" enters into: Job seeking Job holding Job preparation Voting for public officers Deciding where to live Deciding whom to marry Deciding whether or not to have children
Self Awareness	2. The student will be able to identify his main and subordinate values in a given situation.

ACTIVITIES:

Introduction

Write various signs and terms on board that show subordination: >< ; \\ \\\ ; captain, major; / ′. Discuss idea of subordination of students to parents and to teachers; fathers and mothers to bosses.

Tasks

1. Show, by means of definitions and grammatical diagram, how the English language is structured in such a way that certain elements are more important than others:

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*The curriculum concept is found in the teacher's notes.

  a) Basic subject - verb - complement;
     ("Injun Talk")
     Boy likes girl.
  b) Coordinating conjunction:
     Boy likes girl, but girl hates boy.
     (Equality of parts)
  c) Single modifiers (adjectives and adverbs):
     The fat boy likes the thin girl.
     The hairy boy really likes the smelly girl very much.
  d) Prepositional phrase:
     The slimy boy in the sewer likes girls in the evening.
  e) Subordinate clause (adjective and adverb):
     The boy who has flat feet likes the girl because she has one leg.

2. Demonstrate similar concepts of subordination in Music (main theme, dominant note in chord, dynamics among instruments in orchestration) and Art (primary color, emphasis, size of figures.)
3. Ask students to answer three questions in a rank order values clarification exercise e.g. If I gave you $500, what would you do with it?
   a) save it b) give it to charity c) buy something
   The students must identify their first, second and third choice for each question. The teacher will point out that each student has identified his "main" and "subordinate" values.

Summary

In what way does "subordination" enter into grammar, music and art, and life decisions?

EVALUATION:

1. Give students two focus areas, and have them describe in a paragraph how "subordination" enters into that area.
2. Ask students to identify their strongest value in three rank order questions.

English - Grades 9-10
"Standard Language in the World of Work"
Michael Dunn

CURRICULUM CONCEPT:

To describe the different levels of English (Substandard, informal and formal) have different functions.*

RELATED CAREER EDUCATION CONCEPT:

To understand that choosing appropriate language is an employment skill worth learning.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	1. The student will differentiate between standard and substandard language.
Skill Competency	2. The student will describe the functional difference between standard and substandard language.
Skill Competency	3. The student will apply the objectives of 1 and 2 to "formal" and "informal" language also.
Educational Awareness	4. The student will describe the value of standard language in the world of work.

ACTIVITIES:

Introduction
Motivation for this lesson can involve a discussion of appropriate dress styles for various occasions. Also discuss the aim of the lesson - What are the functions of the various levels of English? Also relate the following:
1. Different life and job situations require different kinds of language.
2. Function (purpose) is an important element in decision making.
3. "How well does it work?" is a question we might apply to any operation, existing or proposed.

Tasks
1. Present one example of "substandard" English. How is it "incorrect"? What does "incorrect" mean? When should we use such language?
2. Now show one example of "standard" English. How is it different? How is it "better"? Difference between substandard and standard language is chiefly functional.

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*The curriculum concept is found in the teacher's notes.

3. In the category of "standard" English, now differentiate, by examples, between "informal" and "formal" English. Why does one person use more "formal" English than another? Education is the difference; knowledge of functional levels of English derives from education and results in good jobs.
4. Application to music and art disciplines and listeners
   a) What is characteristic of MUZAK? (characterlessness, ubiquitousness, lack of choice). MUZAK (and kid with radio on a bus) is a social intrusion and a personal intrusion.
   b) What do we mean by "serious" and "popular" music? Is Beethoven in any way "better" than rock?
   c) What reaction do you have to these musical categories?: commercial, patriotic, concert, religious, chamber, atonal, happy, etc.
   d) Distinguish between "court" and "common" art; relate to music. How are signposts an infringement on privacy, as is MUZAK?

   Music and art also perform certain functions.
5. Career Education application:
   How might familiarity with different levels of language affect our lives? Marriage? Job? Recreation?

EVALUATION:

The first four objectives which are not concerned with career education should be tested in the normal course of study. The last objective should be assessed by having each student describe in one page how they value standard language in the world of work.

English - Grades 9-10
"Accuracy and Freshness in Communication"
Michael Dunn

CURRICULUM CONCEPT:

To demonstrate accuracy and freshness in communication.*

RELATED CAREER EDUCATION CONCEPT:

To demonstrate accuracy in communication in a job.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. The student will distinguish between accuracy and inaccuracy in certain occupations or avocations such as: carpentry, violin playing, publishing, electronics, sign painting, warfare.
Skill Competency	2. The student will identify examples of accurate and inaccurate, fresh and trite communication relating to various fields of endeavor

ACTIVITIES:

Introduction

Express an inaccurate statement, trite expression on board: We saw a terrific show. A good time was had by all. Discuss aim of lesson with students--Why is accuracy in language necessary and freshness desirable? By what guideposts may we achieve these qualities?

Tasks

1. Differentiate between: a) misinformation b) miscommunication c) trite communication.
   1) "D" train (when you mean "B" train)
   2) a good book
   3) "bury the hatchet"

   Elicit that (a) situation could be dangerous or fatal, but none of the three are any good because they are all in some way non-communicative. We will concentrate on (b) and (c).
2. Discuss elements of successful communication
   1. extensive vocabulary
   2. figurative language
   3. concrete words
   4. abstract words with clear reference
   5. exact synonyms

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*The curriculum concept is found in the teacher's notes.

3. Have students identify elements of Unsuccessful Communication
    1. loaded words and connotative expressions
    2. jargon
    3. slang
    4. clichés
4. Application to music and art:
    Music: pitch, tempo, rhythm depend on accuracy
    Music criticism: technique, control, poise, musicality, expression, interpretation of score (terms which the music critic employs) must be described accurately.
    Similarly, the art critic must speak accurately about technique and color, line, compositional balance.
    Summary: Critics in music and art must be knowledgeable both in the art and communication.
5. Application to career education:

    What jobs went into building this room? What evidence of inaccuracy do you see? What inaccuracies might there be? What difference would this make in the final product?

    How does the concept of freshness enter the building of this room? Maintenance of the room? Look around you. Aside from the room itself, what else could you judge for accuracy and inaccuracy, freshness and triteness? (dress, jewelry, pens, erasers, etc.) In what area or profession do you think accuracy is most important?

Summary

1. Accuracy is what distinguished the expert from the amateur in any field of endeavor.
2. Similarly, freshness is a quality to be nurtured in any operation.
3. Successful communication requires these two qualities.

English - Senior High
"The Art of Combining An Avocation With a Vocation"
Fran Briskman

CURRICULUM CONCEPT:

Poetry unit: "Two Tramps in Mud Time"*

RELATED CAREER EDUCATION CONCEPT:

To discuss the ideal of combining an avocation with a vocation and possible obstacles or risks one might face.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student will list possible vocations that integrate their avocations.
Self Awareness and Economic Awareness	The student will list advantages to pursuing these combination avocation-vocation
Career Awareness and Self Awareness	The student will indicate possible obstacles or risks they might face when pursuing these vocations.

ACTIVITIES:

Introduction

Prior Activity:
1. Unit or oral interpretation of poetry
2. Homework: read for understanding, interpretation and performance "Two Tramps in Mud Time".

Introduction: Call on volunteers for an oral reading of this poem to compare the students interpretation of author's theme.

Tasks

1. Have several students perform this material using a lectern and a tape recorder. The recordings may be used for replay when discussing subtle nuances in interpretations.

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* The curriculum concept on which this lesson is based is found in Two Tramps In Mud Time by Robert Frost.

2. After the readers have completed the performances, lead the class in a discussion of "theme" as related to the poem. (Theme: a job well done is one in which the worker has combined his vocation and avocation).
3. Why do you agree or disagree with this theme?
4. Note the authors value judgement when vocation and avocation are out of tune (strangers, 7-8).
5. Why would you value vocation over avocation or vice versa?
6. List possible vocations that would possibly allow you to integrate your current avocations.
7. Explain (defend) the advantages to pursuing this combination (vocation-avocation).
8. In the remaining time select a panel of five volunteers who have previously had a lesson in decision making, perhaps, as part of a guidance program. The panel will listen to individual responses to activities 6 and 7. The panel will then lead discussion with the individual and illuminate possible obstacles and/or risks the individual may face in his vocation/avocation career choices. This activity should continue for a minimum of two lessons.

EVALUATION

Present a case history of high school student which should include educational, avocational, vocational and social background. In addition offer several different job opportunities which specify qualifications and natures of the job.

The student should then choose the job which seems most suitable to the case study subject. He must support his decision by indicating how advantages, obstacles, and risks balance in favor of his choice and away from the other choices.

English - Senior High
"'The Erne From the Coast' Value Clarification"
Michael Weingarten, Hedy Geller, Stan Solomon

CURRICULUM CONCEPT:

To interpret the reading "The Erne From the Coast"*

RELATED CAREER EDUCATION CONCEPT:

To be aware of the ramifications of the term "adulthood" through values clarification and the reading of "The Erne from the Coast".

THEMES AND OBJECTIVES:

Themes	Objectives
Self Awareness	Given a values clarification questionnaire, the student will state in a well developed paragraph his/her personal view of adulthood.
Self Awareness	Given personal concept of adulthood the student will write a well developed paragraph discussing the effect his/her concept of adulthood will have on eventual career choice and life-style.
Skill Competency	Given a short answer test, student will demonstrate an understanding of story.

ACTIVITIES FOR SESSION ONE:

Introduction
Since the lesson is in the affective domain, it is suggested no aim be discussed with the students.

Tasks
1. Begin class by administering the following values clarification naire. Be sure and emphasize that is is one's opinion and there is no right or wrong answer.

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* The curriculum concept on which these lessons are based is found in "The Erne from the Coast", Ideas and Patterns in Literature I, Knapp, Leary, Harcourt, Brace and World, Inc., New York, 1970.

"'The Erne From the Coast' Value Clarification"

Value Clarification Questionnaire

Directions: This form asks you to give your opinion to several statements. Place a 1, 2, or 3 next to each statement. Use the following key

1 = must agree with
2 = agree with less
3 = agree with least

1. When I become an adult I will be able to:
   _____ (a) support my family
   _____ (b) have a mature relationship
   _____ (c) be successful on my job.
2. An adult:
   _____ (a) knows how to deal with his feelings
   _____ (b) is able to make his own choices
   _____ (c) is able to control other people.
3. I will see myself as an adult:
   _____ (a) when I am married
   _____ (b) when I am out of school
   _____ (c) when I have a job.
4. An adult is someone:
   _____ (a) who can complete a job without supervision
   _____ (b) who can handle an insult without getting even
   _____ (c) who can budget his/her money.

Have student discuss their responses to above questions to help them understand how their own responses relate to their own value systems. (Note: This exercise is to clarify values and not to lead to an evaluation or judgement of student's response by members of the class or the teacher.

Summary:
Based on values clarification exercise and discussion, students will state their own personal views of adulthood.

RESOURCES:

Values Clarification Exercise

EVALUATION:

Students will write a brief paragraph discussing their view of what an adult is based on the values clarification exercise.

ACTIVITIES FOR SESSION TWO:

Introduction:
Ask students if their parents seem the same way they see themselves.

Tasks:
1. Ask students how they can relate their own experiences to the above question to the way Harry's father views him.

2. Ask students how Harry's father's view of him influenced Harry's picture of himself (elicit: father tells him he shows no sign of sense, that he should grow-up, etc).
3. Ask students what determined Harry's society's view of adulthood (elicit: farmer, emphasis on the physical strength).
4. Students will discuss what determines a society's particular view of adulthood (note: discuss Bar Mitzvah, walkabout, Confirmation, New York's Haitian view, Chinese view, Aborigines view, etc.).

Summary:
Based on your concept of adulthood that you obtained in the previous lesson, to what extent do you think Harry demonstrated mature adult qualities?

RESOURCES:

"The Erne from the Coast" (Ideas and Patterns in Literature I, Knapp, Leary, Harcourt, Bruce and World, Inc., New York, 1970).

EVALUATION:

Each student will write a well-developed paragraph discussing the effect his/her personal view of adulthood will have on his/her eventual choice of career and life-style. Each student will take a short answer test on the story.

English - Senior High
"Personality Diving"
Stanley Solomon

UNIT RATIONALE:

This unit is composed of four sessions: Personality Diving, Personality Plus and Minus. A Closer Look at My Personality, and Accentuate the Positive. The unit is designed to accompany or follow the standard class biography unit. It is designed to demonstrate to the student that personality can be explored in an in-depth fashion and that the self-awareness gained from the experience can be utilized in the job-search setting. The unit involves standard English skills of class discussion and composition writing.

By no means should this set of lessons be thought of as all-inclusive and final. The creative teacher will certainly want to add additional lessons in self-awareness, depending upon his particular philosphical outlook, expertise, etc. In order to assist in creation of additional lessons a list of supplementary activities is being included.

CURRICULUM CONCEPT:

To understand a good biographical sketch is based not only upon superficial details but rather upon deeper, more probing personality data.*

RELATED CAREER EDUCATION CONCEPT:

To understand the concept of self-awareness, that is, in order to find our life's work, we must be able to understand ourselves so that we can fit ourselves to the right job.

THEMES AND OBJECTIVES:

Themes	Objectives
Self Awareness and Educational Awareness	Given an understanding of personality analysis, each learner will describe at least three examples of personality traits of the character read about in the biography assigned to the class.

ACTIVITIES:

Introduction

Present two brief teacher-made biographical sketches - one containing solely superficial data and the other containing both superficial data and personality analyses. (It should be understood that the first sketch is deliberatly lacking in the requisite in-depth personality data).

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* The curriculum concept is found in teacher's notes.

Sketch 1

Mr. __________ is at present an english teacher at __________ High School. He began teaching here ____ of 19____. Formerly he was a teacher at ______ Junior High. He attended __________ University, where he received his baccalaureate and masters degrees. He is married and has two children. He is presently ______ years of age and lives in his own (house/apartment).

Sketch 2

Mr. __________, a teacher at __________ High School, is a colorful personality. His students appreciate his sense of humor and his ability to make his classes lively. He is known to be a strict but fair disciplinarian who is always willing to give his students a chance to present their point of view. Mr. __________ believes that there are no final answers in life and that an intelligent person must remain flexible in his opinions, attitudes, and outlooks, one thing Mr. ________ does insist upon is that his students use their mental powers to analyze and investigate any matter before making final decision.

Note: (These 2 sketches can be expanded upon the teacher's discretion). Elicit from the class concept that a good biographical sketch is an in-depth exploration of the subject's personality as well as standard biographical data.

Tasks:
Have class members cooperate in creation of a list of personality traits of the character read about in the class biography. Encourage class members to concentrate upon the more probing psychological data as revealed in biography.

Summary:
Have students explain why the class-generated list offers a more penetrating analysis of the character under dicussion than could be found in a mere listing of biographical data.

RESOURCES:

Two teacher-made "biographical sketches" of a fictitious character - one containing only superficial data and other containing psychological and personality data as well as biographical data.

EVALUATION:

Have students state from memory at least three psychological personality traits of the subject of the in-class biography.

English - Senior High
"Personality: Plus and Minus"
Stanley Solomon

CURRICULUM CONCEPT:

To understand that every personality is made up of both strong points (assets) and weak points (liabilities).*

RELATED CAREER EDUCATION CONCEPT:

To understand that, in order to present himself to an employer, a job-seeker must be able to analyze both his personality assets and liabilities.

(NOTE: This is the second of four sessions which correspond to an English biography unit)

THEME AND OBJECTIVES:

Themes	Objectives
Self Awareness and Educational Awareness	Given a list of personality traits devised by the class in the previous session, the student will classify each as either an asset or a liability.

ACTIVITIES

Introduction

The teacher will present a rexographed (or transparency projected) list of personality traits of an imaginary character, the list should include a deliberately selected "mix" of obvious assets and liabilities. The following list may be used or another could be desired by the instructor.

A Personality Summary
Pleasant, friendly, outward-going,
sometimes quick tempered
Impatient with slow-thinking people
Willing to volunteer for extra work
Well organized
Unstable and moody
Sympathetic
Selfish and demanding

Discuss with class purpose of this session.

Tasks

1. Instruct the class to analyze the list on the board and rewrite it into two broad categories, using heading of strong points and weak points (or any other term deemed appropriate). Have the class secretary enter responses on

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* The curriculum concept is found in teacher's notes.

a chart written on board.

2. Ask class to study board and determine for each half of chart, a theme of commonality. Elicit concept of assets and liabilities. Emphasize that each person's personality contains both assets and liabilities.
3. Ask the class to analyze the list of personality traits produced in yesterday's session with goal of breaking the list into categories of assets and liabilities. Have the class secretary transcribe responses on board. Provide class discussion to determine validity of each entry will be conducted.

Summary:
A balance sheet contains a list of assets and liabilities. Why is each person like a balance sheet? Elicit review concept of assets and liabilities.

RESOURCES:

Essential teacher-made list of personality traits as explained in introduction.

EVALUATION:

Have students reproduce from memory at least two assets and two liabilities of the subject under discussion (class biography).

English - Senior High
"A Closer Look at My Personality"
Stanley Solomon

CURRICULUM CONCEPT:

To understnad that the ability of honestly evaluate one's personality assets and liabilities is an essential part of the maturing process.*

RELATED CAREER EDUCATION CONCEPT:

To be aware that the job seeker must be able to perform an in-depth analysis of his personality traits.

(Note: This is the third of four sessions which correspond to an English biography unit).

THEMES AND ABJECTIVES:

Themes	Objectives
Self Awareness and Educational Awareness	Given personality assets and liabilities, the student will compose a 250 word written composition enumerating and explaining fully at least three of his own assets and liabilities.

ACTIVITIES:

Introduction
Present list of common personal pronouns. Ask class which is used most often. (Expected answer is "I" or "me") Use this as a springboard. State to class that they will be writing about themselves and producing an in-depth personality analysis similar to that which was discussed in past lessons.

Tasks
Production of 250-word essays. Have students organize the essay first identifying the assets and liabilities to be included. Explain that the essays will be collected, graded, commented upon, and returned.
Ideally, the class will be given time to revise and re-submit any that do not measure up to acceptable standards of written communication.

Summary
Review the purpose of the exercise in understanding oneself.

RESOURCES:

Teacher notes and perhaps sample 250-word essay projected on board.

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*The curriculum concept is found in the teacher's notes.

EVALUATION:

Production of the 250-word essay, which should be in conformity with commonly-held standards of good English.

English - Senior High
"Ac-cen-tu-ate the Positive"
Stanley Solomon

CURRICULUM CONCEPT:

To understand that a clever person will use information obtained from an exercise in self-awareness.*

RELATED CAREER EDUCATION CONCEPT:

To be aware that in dealing with an employer, an applicant should learn to emphasize his assets and minimize his liabilities.

(Note: This is the fourth of four sessions which correspond to an English biography unit)

THEMES AND OBJECTIVES:

Themes	Objectives
Self Awareness and Employability Skills	Given the job requirements of an imaginary employer, the student will identify from his self-inventory (see session 3) those assets that are related to the particular requirements.

ACTIVITIES:

Introduction
What are some of the qualities which a boss seeks in his employees? (list on board).
Why is it important for you, the prospective employee, to have this information?

Tasks
1. Using a opaque projection. Project a student's list of assets and liabilities (see sessions 2 and 3) on board alongside the list of employer demands. Have class indicate how this sample student list can be tailored to fit the employer's list.
2. Conduct a discussion on how it is important to promote one's assets and to minimize liabilities. In addition, the job seeker should learn to try to turn liabilities to assets.

Summary
Why is it important to understand what a boss requires of his workers? How can you insure that a boss will be impressed by you?

Supplementary Activities
Because of the limitations of time, it was deemed unwise to attempt to write lessons for every possible activity that could be applied to this unit.

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*The curriculum concept is found in the teacher's notes.

However, in order to present as complete an approach as possible, the following additional activities are offered:

1. Following session 4, the teacher could present a discussion or case study on the concept of selling oneself to an employer.
    a. Should you hide your liabilities?
       What is the difference between
        1. white lie
        2. outright falsehood
    b. Should a job-seeker attempt to be moral when the business world exhibits many instances of immorality?
2. Another possible session could investigate the concept of compromising one's values to meet the requirements of an employer.
    i.e. How much of compromise is justifiable and when does compromise become "copping out?"
3. There are many self-assessing devises available, such as the Kuder Interest Inventory, which might be beneficial in the early stages of this unit.

RESOURCES:

Class-made list of typical employer requirements.

EVALUATION:

Given a teacher-made list of requirements from a typical employer, each student will demonstrate how his personal asset-liability list (see session 3) can be adapted to fit these particular requirements.

English - Senior High
"Career Exploration Unit"
Stanley Solomon

RATIONALE:

This unit, a long range independent research project, is designed to supplant the standard book report with a more relevant, high-interest level topic designed to generate genuine student interest. It is composed at seven lessons, please note, however, that this project does not absolve the student of the task of reading. Indeed, in order to do an adequate job the student must read not only a work of non -fiction but also pamphlets, magazine articles, etc. In addition, the project encompasses other English skills, including letter writing, composition writing, group discussion, logical thinking, and, of course, reading practice, spelling, and vocabulary.

The unit is designed to enable the student to produce an intensive exploration of a career area in which he or she is interested.

The unit is flexible in approach in that it can be utilized on any grade level with most ability-level groups.

The unit consists of the following lessons:

Lesson 1	I Talk of Dreams
Lesson 2	My Dream Career
Lesson 3	Investigating My Career Choice
Lesson 4	Why Call that a "Good Job?"
Lesson 5	Writing Letters to Obtain Job Information
Lesson 6	How Can the Library Help Me to Learn About My Career?
Lesson 7	A Second Look at First Impressions
Appendix	Career Checklist and Summary Statement

English - Senior High
"I Talk of Dreams (Career Exploration Unit)"
Stanley Solomon

CURRICULUM CONCEPT:

To understand that an essential aspect of developing mental maturity is the ability to conceptualize and define a catchword or toss-about phrase which might occur in everyday speech*

RELATED CAREER EDUCATION CONCEPT:

To be aware of the attractions offered by various career areas.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	Given an understanding of the term "Dream Career", the student will state the criteria by which certain careers are judged more desirable than others. And apply this to situations.

ACTIVITIES:

Introduction

1. Write on board: "Dream House"
   "Dream Car"
   "Dream Vacations", etc.
2. Ask "Why is word dream used in all of these?
3. Elicit concept that by "Dream ______" it is meant the absolutely perfect, highest or best attainable, etc. Also elicit concept that personal preferences are important here and that one person's dream can be another's nightmare.
4. How would you describe a Dream Career?

Tasks

1. Have students contribute suggestions for the topic "what dream career".
   Possible criteria:
   (a) job related to interests, abilities, hobbies, etc.
   (b) high-salaried job
   (c) high-status, glamour job
   (d) others
   Discuss above list, ask for examples for each.
2. Discussion-provoking topic--need a job have high pay or easy conditions to be a dream job?

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* The curriculum concept is found in teacher's notes.

"I Talk of Dreams (Career Exploration Unit)"

Summary

When we use the phrase "Dream Career" we are not speaking loosely. Instead what we have in mind is a definite concept that can be supported by a set of standards.

EVALUATION:

To learner: "Can you suggest a dream career for each of the following:
(be sure to explain your answer using criteria)
a. a girl who enjoys making up her own recipes and serving them.
b. a student who thrives upon the respect and admiration of his peers.
c. a boy who enjoys taking apart and tinkering with complex machinery.

(Note to teacher: these are just examples. You may want to devise your own based upon the particular interests and abilities of your classes).

English - Senior High
"My Dream Career (Career Exploration Unit)"
Stanley Solomon

CURRICULUM CONCEPT:

To be aware that communication implies the ability to analyze and express clearly one's personal thoughts*

RELATED CAREER EDUCATION CONCEPT:

To understand that a student must be able to analyze and express his reasons for his interest in a particular career area.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness and Skill Competency	Given an understanding of the various criteria commonly used for reinforcing the desirability of a career area (see previous lesson) the student will compose a 250 word essay, using correct composition form, on the topic "Why ________ is My Dream Career".

ACTIVITIES:

Introduction

1. Present situation to class in which one student A denigrates an individual on a purely subjective basis--i.e. "I just don't like him/her". Contrast this with situation in which another student denigrates an individual but is able to substantiate his opinions with evidence based on certain standard criteria of good teaching (preparation, rapport with students, flexibility, etc.).
2. Ask which student is more likely to gain a sympathetic ear from administration.
3. Elicit that the second student would be deemed more responsible, as he can substantiate his opinions with reference to a commonly-held set of briefs.
4. Establish concept of criteria as a set of standards by means of which something can be judged.
5. With understanding of criteria established, refer to previous lessons in which criteria for a Dream Career were suggested.

Tasks

Instruct class that they are going to create a 250 word essay on the topic "Why ___________ is My Dream Career". Students must be sure to justify their opinion by referring to the criteria as established in the previous lesson.

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* The curriculum concept is found in teacher's notes.

"My Dream Career (Career Exploration Unit)"

Emphasize that they are going to tell not what their dream career is, but why. (Note to teacher: following good teaching technique, these essays will be collected, graded for content and mechanics, then returned to the students. Time should be set aside for standard composition--revision/ correction exercises as deemed appropriate).

Summary:
Teacher will indicate; at end of writing session, that students have just gone through an exercise designed to firm their thoughts so that they can progress to the next stage of the unit.

RESOURCES:

Written dialogue between first student A and second student B. The former maintains that he dislikes a certain teacher but it is apparent that he is unable to substantiate his opinion. The latter has the same opinion, but can base his feelings on certain criteria of good teaching (see introduction).

EVALUATION:

Production of essay as stated in objective using the four point evidence in the previous lessons.

English - Senior High
"Investigating My Career Choice"
Stanley Solomon

CURRICULUM CONCEPT:

To understand that there is a method by means of which the accuracy of an opinion may be examined and verified*

RELATED CAREER EDUCATION CONCEPT:

To understand that a matter as serious as the choice of a career area should be thoroughly explored before any decision is made final.

THEMES AND OBJECTIVES:

Themes	Objectives
Decision Making Skills	Given an understanding of the technique of scientific investigation (hypothesis, research, proof/disproof), the student will suggest two methods by means of which he might test or examine his choice of a dream career.

ACTIVITIES:

(Note to teacher: This is the lesson in which the concept of the research project is to be introduced to the class)

Introduction

1. Present the following situation to the class-"You are a scientist working for a manufacturer of lightbulbs. You believe that plants will grow faster in fluorescent light than in ordinary light. If you are correct it could mean a million dollar contract for your company and a big raise for you. If you are wrong the company will lose money and you might be fired. What is your next step?"
2. Elicit from class the concept of scientific investigation. That is, a scientist has an idea (hypothesis) which he must prove or disprove. In order to do this he must perform research or investigation. He must also be aware that his investigation might yield negative results and thus his theory might have to be discarded.

Tasks

1. Using the thoughts from the introduction ask the question: How does this relate to our work in careers? (Elicit concept that the choice of a career area can be investigated or researched).
2. Elicit from class methods which might be used to research or investigate a particular career area. Possible means of investigation:

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*The curriculum concept is found in teacher's notes.

   a. letters to corporations for information
   b. books
   c. pamphlets
   d. interviews, visits, etc.
   e. government publications

3. Explain that the class is going to enter into a research project in which each student will investigate his particular area of career interest. Each student will submit a written proposal in which he will state his area of career interest and will suggest 2 ways in which he might investigate this area. This project will count as either one or two book reports and is a requirement of the course. Give students time to prepare the written proposal.

Summary
After collecting proposals review point two of introduction.

EVALUATION:

Students will submit written proposal for investigating their particular area of career interest. Student must choose 2 tools of investigation and explain how he will proceed with this research.

English - Senior High
"Why Call That a 'Good' Job?"
Stanley Solomon

CURRICULUM CONCEPT:

To understand that, when doing research, the investigator must understand exactly what it is that he is seeking to discover*

RELATED CAREER EDUCATION CONCEPT:

To understand that a job-seeker must establish certain criteria by means of which he can evaluate a job or career area.

THEMES AND OBJECTIVES:

Themes	Objectives
Decision Making Skills	Given an understanding of the term criteria, the student will suggest at least three criteria by means of which his choice of career area may be evaluated.

(Note to the teacher: The rationale for this lesson lies in the fact that once the students are aware that they are to do a research project, they should be aware of what it is that they are seeking. It is best, of course, to let the students determine this themselves).

ACTIVITIES:

Introduction

Ask:

1. How many students have a new car in the family?
2. How many noticed that their families were unsure about which car to buy?
3. How did your parents go about making a choice?
4. What is the most sensible way to choose a new car?

(Expected answer is to establish a set of criteria that can be used to judge, i.e. price, roominess, mileage, etc., to be obtained from class). Elicit from class concept that once criteria are established the various possibilities are investigated and measured against the criteria.

Tasks

What criteria might we set up to evaluate a particular job or career area? What are some of the things you would want to know in order to make a choice? Note: class discussion will elicit the following set of criteria for examining a career:

(a) job duties
(b) salary and salary trends
(c) working conditions

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*The curriculum concept is found in the teacher's notes.

"Why Call That a 'Good' Job?"

(d) fringe benefits
(e) opportunity for advancement
(f) job security
(g) training, apprenticeship, etc.

Note: in order to provide appropriate practice, let class select a career area with which they are familiar and examine it according to the above criteria, creating a chalkboard chart which can be copied into notebook. This might require a separate lesson.
(See appendix A for sample checklist.)

RESOURCES:

New car advertisements to aid in introduction.

EVALUATION:

Student will state from memory at least three criteria useful in evaluating a career area.

English - Senior High
"Writing Letters to Obtain Information"
Stanley Solomon

CURRICULUM CONCEPT:

To understand that the business letter can be used as a research tool*

RELATED CAREER EDUCATION CONCEPT:

To understand that one way to investigate a career area is to write to a corporation in that area and request information.

THEMES AND OBJECTIVES:

Themes	Objectives
Employability Skills, Education Awareness and Skill Competency	Given an understanding of the correct format for a business letter, the student will construct a business letter to a corporation or government agency requesting information about his particular area of career interest.

ACTIVITIES:

Introduction

1. Present teacher-made business letter containing errors in form.
2. Ask class to correct errors.
3. Project corrected version on board so class can ascertain correctness of their responses.

Tasks

1. Now that we know how to write a business letter, how can it help us in our research project? (Expected answer is to write to corporations requesting information on items listed in previous lesson.)
2. What would you say in such a letter? (Class secretary will place model letter on board as class members offer suggestions.)
3. Have members of class write to corporations or agencies involved in particular career areas. (Note: it will be necessary for teacher to provide students with correct addresses or suggestions on how to obtain addresses.)

Summary

Have class submit letters for correction and, when this is done, actually mail letters as part of research project.

Note: It is possible that this lesson will need to be expanded over a two-day period.

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* The curriculum concept is found in the teacher's notes.

"Writing Letters to Obtain Information"

RESOURCES:

1. Teacher-made business letter containing errors in business letter form (on rexographed sheet).
2. List of addresses of corporations or agencies in various career areas.

EVALUATION:

Production of individual letters containing requests for information about specific area of career interest.

English - Senior High
"How Can the Library Help Me to Learn About My Career"
Stanley Solomon

CURRICULUM CONCEPT:

To become aware of the wide range of research tools available in the typical school library*

RELATED CAREER EDUCATION CONCEPT:

To become aware of how the library enables one to learn more about an area of career interest.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	Given an awareness of the various research tools available in the library, the student will write a brief proposal indicating how he plans to implement such tools in carrying out his research project on a career interest.

ACTIVITIES:

Note: Ideally, the following lesson will be taught or assisted by the school librarian, as the average English teacher cannot hope to have the expertise of a professionally-trained librarian in handling the wide, and sometimes overwhelming, range of research and resource tools available in a well-stocked school library.)

Tasks

In planning the lesson with the library personnel, the teacher should emphasize that the following points need to be covered:

1. The use of the Occupational Outlook Handbook (for the job descriptions, salary trends, etc.)
2. The use of various career oriented books such as the "Looking Forward to a Career in ________" series (published by Dillon Press), the "So You Want to be a ______" series, and others of which the librarian is undoubtedly aware.
3. The use of various federal and state government publications. The students should be made aware of the existence of these materials and should be given the opportunity to engage in a hands-on activity so that the element of strangeness can be eliminated.

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*The curriculum concept is found in teacher's notes.

"How Can the Library Help Me to Learn About My Career"

RESOURCES:

As noted under "activities" the school librarian should be consulted, for he or she is aware of many more resources materials that can begin to be listed here.

EVALUATION:

The student will write a proposal indicating which resources he plans to utilize and explaining how he will use said resources.

English - Senior High
"A Second Look at First Impressions"
Stanley Solomon

CURRICULUM CONCEPT:

To be able to communicate attitudes, feelings, and impressions in writing*

RELATED CAREER EDUCATION CONCEPT:

To understand that an intensive career exploration experience will enable the student to express either an affirmation of or a rejection of his attitude toward a particular area of career interest.

THEMES AND OBJECTIVES:

Themes	Objectives
Self Awareness and Skill Competency	Given an understanding of the concept of a "wrap-up" or "evaluation" exercise, the student will produce a 250 word essay either affirming or rejecting his earlier opinion of his particular area of career interest.

ACTIVITIES:

Note: This lesson is intended as a culminating activity in addition to the report which each student will be required to submit.

Introduction

Ask students to think back to the early days of the semester. Ask them to recall their early impressions of one of their teachers. How have these impressions changed during the course of the semester? Elicit concepts of affirmation or rejection of early impressions.

Tasks

Explain that they will be writing a 250 word essay evaluating their earlier impressions of their particular area of career interest in light of what they have learned from their research project. The general theme of the essay will center around the concept "Now that I know more about __________ I think that I will pursue/drop my interest in it."

Summary

If time permits, the class can be polled to determine how many students are still interested in their career area and how many have changed their opinions.

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*The curriculum concept is found in teacher's notes

"A Second Look at First Impressions"

RESOURCES:

None necessary, except perhaps a written checklist of good composition form which each teacher should be able to devise based on an awareness of student's relative ability.

EVALUATION:

Compositions will be collected and graded according to whatever standards of good writing and use of english are being maintained by each school. Compositions will be returned and opportunity provided for correction and revision exercises.

APPENDIX

What follows is a tentative format for a project guidesheet. Ideally, this guidesheet, or a similar version, will be distributed to students after lesson 4A so that they can be aware of exactly what information they are seeking with reference to their area of career interest. The teacher should feel free to add to or delete from this checklist as he or she sees fit.

Career Checklist

To the student/researcher:

In exploring your choice of career area you should attempt to obtain answers to the following questions. This will enable you to do as complete a job as possible.

1. Name of career area
2. Typical places of employment in this area
3. Nature of the work
   a. job duties
   b. unusual features such as danger, difficulty, etc.
4. Typical salary (per year, per pay period)
5. What expectation for salary increases
6. What fringe benefits
   a. health coverage
   b. life insurance
   c. pension
   d. profit-sharing
7. Job security
   a. union contract?
8. Opportunities for advancement
   a. career ladders, etc.

9. How to get job

    a. requirements, schooling, etc.

    b. training, apprenticeship

10. Additional pertinent information

Summary Statement

To the teacher:

The preceding set of lessons should be considered an attempt to provide a core-group of activities by means of which a career exploration research project can be instituted in a typical high school classroom. Of course, the teacher using this unit may very well see a need for additional lessons, and he or she is encouraged to include whatever such lessons are deemed necessary.

In addition, such matters as length of the project, determ nation of due dates, etc. are at the discretion of each teacher.

In addition to covering the preceding set of lessons, the teacher may wish to do the following:

a. Devote one or more class periods to a "work-in-progress" report in which individual class members can confer with the instructor, obtain advice, iron out difficulties, etc.

b. Set aside class periods for the introduction of films, guest speakers, tape cassettes, or whatever other resources are thought appropriate.

c. Especially with groups of slower learners, arrange for a series of class visits to the library so that students will be able to work on their individual projects and yet have the assistance of the teacher to help them overcome whatever inadequacies, real or imagined, they may feel toward library research.

d. Establish a Bulletin Board Committee whose task it will be to assist in the preparation of Career Bulletin Boards.

LITERATURE

Lesson/Unit Title	Author(s)	No. of Lessons
The Theater Then and Now	Hedy Geller	6
A Look At Elizabethan Society	Hedy Geller	2
Fusing Career Education and A Midsummer Night's Dream	Hedy Geller	11
Airing My Own Thoughts	Stanley Solomon	1
Soothing Troubled Waters	Stanley Solomon	1
Feature Bout: Worker vs Boss!	Stanley Solomon	1
Exploring a Dancer's Role in the World of Work	Arthur Kirson	1
Persuading Others	Michael Dunn	1
Decision Roads	Michael Dunn Michael Weingarten	2
Societal Structure Affects Our Lives	Muriel San	1
How Societal Forces Change Individuals	Muriel San	1
Understanding Our Emotions and How They Affect Our Decisions	Muriel San	1
Past, Present, and Future Societal Structures	Muriel San	1
Developing Decision Making Skills	Muriel San	1
Perceptions of Success	Muriel San	1
Costuming Careers	Arthur Kirson	1
Theatrical Musical Careers	Arthur Kirson	1
Roles of Women in A Raisin In The Sun	Arthur Kirson	1
Comparison of Differing Periods of Time and Personality Adjustment	Arthur Kirson	1
Exploring Present Day Mental Health Careers	Arthur Kirson	1
Daydreaming about Exotic Careers	Arthur Kirson	1
The Effect of Physical, Social and Psychological Factors upon Career Choices	Arthur Kirson	1
The Role of City Planning in a Changing World	Arthur Kirson	3

English Literature - Grades 10-12
"The Theater Then and Now"
Hedy Geller

CURRICULUM CONCEPT:

To become aware of the nature of the Elizabethan and contemporary theater*

RELATED CAREER EDUCATION CONCEPT:

To become aware of the job possibilities associated with the contemporary "world" of the theater. To become aware of the life-styles associated with these jobs.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness and Career Awareness	Given the topic sentence "The theater is not so much a career as a way of life for people in it", the student will write a paragraph based on concepts learned about Elizabethan and contemporary theater. The paragraph will identify job possibilities and related life styles.

ACTIVITIES FOR SESSION ONE:

Introduction
Put on blackboard: "Indeed the imagination is the best scene designer and prop man of them all."

Tasks
1. Ask students what was unique about the Elizabethan stage that made the imagination necessary for the spectators in the audience (Elicit: Elizabethan Stage-
    a. Bare platform
    b. No footlights
    c. No curtains
    d. Crude props
    e. Lacked movable machinery and scenery

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*The curriculum concept is found in the teacher's notes.

  f. No microphones
  g. No actresses)
2. Ask students what other limitations the Elizabethan theater imposed? (Elicit: outdoor performances limited by weather, time of day).
3. Ask students what was used to overcome some of the handicaps. Elicit:
  a. Prologue
  b. Epilogue
  c. Soliloquoys
  d. Monologues
  e. Asides
  f. Chorus
  g. Dialogue
  h. Acting companies of young men took female roles)
4. Have students define the above terms.
5. Ask students if they were architects commissioned to build a reproduction of an Elizabethan theater what they would have to include. (Elicit: stage, pit, balconies, curtained area in rear of stage, trap door in stage for entrance of ghosts and devils, trap door in canopied structure over stage for entrance of angels.)
6. Students on the committee that researched the development of theater during the Elizabethan Age will give talks. (Note: These talks will cover the transition from traveling companies that performed in courtyards to the establishment of theaters like The Globe, The Theater, The Curtain, etc.)

Summary

Students on the committee to build a model of The Globe theater will show it to the class and the students will review and identify the different areas of the theater discussed in the lesson.

ACTIVITIES: (FOR SESSION TWO) The Actors and the Audience:

Introduction:

The Puritan sect of the Elizabethan society believed the theaters were "the inventions of the devil and the food of riots and adultery." Puritans believed actors were "masters of vice and sons of idleness." (Note: Quote from Life in Elizabethan Days by Davis, Harper & Row, 1930). Have students on the committee to research the lifestyle of actors in the Elizabethan theater comment on this quote. (Note: The concept of lifestyle will be discussed in World of Work, social studies and English class before this lesson.)

Tasks

1. Have the students on the committee that researched the life-styles of the actors report on the following:
   a. Insecure profession (theaters were closed down for meddling in politics, plague, etc.)
   b. Actors were popular but had low social standing.
   c. Acting involved strenuous activities.
   d. Actors traveled a lot.
   e. Actors were separated from their families.
   f. Penalties often imposed on actors.
   g. Actors organized into companies under protection of a noble patron.
2. Have the committee that did research on the Elizabethan audience give reports similar to the one attached to this lesson.

Summary:
Based on our discussion of the actor's lifestyle and the audiences of Shakespeare's day, do you think you would rather be an actor during the Elizabethan Age, or an actor of today?

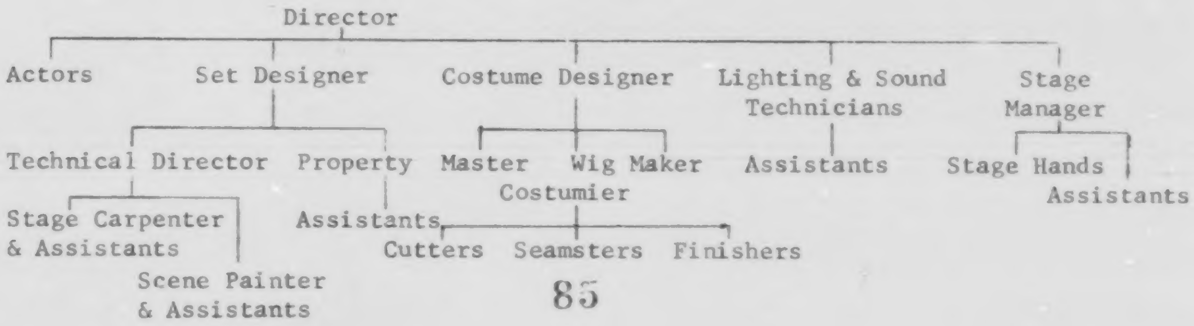
ACTIVITIES FOR SESSION THREE:

Introduction:
It is said that "The theater is not so much a career as a way of life for people in it." (Note" quote from Looking Forward to a Career Theater by Campbell & Devlin, Dillon Press, 1970.) Yesterday we discussed the lifestyle of the actors during the Elizabethan Age, today we will discuss the lifestyles and tasks of actors and all people involved in the production of a play in today's theater.

Tasks:

1. Ask students to describe the "world" of today's theater. (Elicit: warm and friendly atmosphere, "family" bonds with all those working to create play, glamorous and dull, people judged on talents and attitudes, heartbreaking and glorious, etc.)
2. Have the students receive a hand-out of the following diagram which they will complete with information supplied by various committees:

The People Who Work on a Production


Director
Actors
Set Designer
Costume Designer
Lighting & Sound Technicians
Stage Manager
Technical Director
Property
Master Costumier
Wig Maker
Assistants
Stage Hands
Assistants
Stage Carpenter & Assistants
Assistants
Cutters
Seamsters
Finishers
Scene Painter & Assistants

3. Committees of students will give brief reports based on their research in the library's resource center covering the training, qualifications, tasks and lifestyles associated with the jobs depicted in the diagram. (E.g., Actor - needs "gypsy" outlook on life, insecure job, must travel, dedication sometimes leads to losing touch with the rest of the world, tedious irregular hours, now society admires actors, need well trained voice and body, ability to arouse feelings, acquire a good general education, experience can come from first having other jobs in the theater, acting in school plays, etc.)
4. Ask students what other jobs not mentioned on diagram are involved in the world of the theater. Elicit:
   a. Theatrical agent
   b. Member of producer's staff
   c. Member of theater unions' staff
   d. Critic
   e. Usher
   f. Producer
   g. Others to be added.

Summary:
Ask students if they would consider any of the jobs in the "world" of the theater based on their values and needs. (Students should consider some jobs in theater are more secure than others; actor requires "gypsy" outlook on life, some jobs require background in history and design (architecture and costume) etc.)

ACTIVITIES FOR SESSION FOUR:

Introduction
Contemporary theater is going through a period of development and exploration. Have students discuss terms and names which will elucidate this concept.

Tasks
1. Have students discuss the following items:
   a. CSC Repertory
   b. Joseph Papp
   c. Off-off Broadway
   d. "Theatrical Experiments"
   e. Phoenix Repertory
   f. Negro Ensemble Company
   g. Others to be added by students
   (Note: Discussion of terms will deal with new kinds of plays, acting, designs, audiences, theaters, etc.)

2. Have students participate in a brain storming session in which questions to be asked on the field trip the following day will be prepared.

Summary:
Have each student write up a list of at least five questions to be asked on the field trip to the theater based on their discussion of new trends in the theater and the brainstorming session.

ACTIVITIES FOR SESSION FIVE:

Introduction:
Prepare students for the procedures to follow on the fieldtrip.

Tasks
1. Have students attend the preview of a play performed by CSC Repertory and then a question and answer period will be arranged with the people involved in the production (e.g., actors, director, stage manager.)
2. Insure that in the questioning period that the individuals describe physical requirements of job, worker environment, attitudes and temperaments necessary for success on the job, social and psychological benefits, economic reward, other life style factors as well as training and educational requirements.

Summary

None provided.

ACTIVITIES FOR SESSION SIX (Post Field Trip):

Introduction
Ask students if the field trip they have taken has encouraged or discouraged them to consider a job in the theater.

Tasks
Ask students what contribution to the success or failure of the play was provided by the acting? Stage design? Music? Sound effects? Costumes? Lighting?

Summary
Ask students if they were the director, costume designer, actor, lighting or sound technician involved in this play what they would have done in their role to change the play.

"The Theater Then and Now"

RESOURCES:

1. Model of Globe Theater constructed by committee of students.
2. Library Resource Center.
3. Hand-outs of diagram of The People Who Work On A Production.
4. Field trip to preview of a play.
5. People to answer questions from class involved in the production of the play.

EVALUATION

Students will write a paragraph developing the topic sentence by arguments in a line of reasoning. Topic sentence:
"The theater is not so much a career as a way of life for the people in it."
(Note: This method of development will be taught in a lesson prior to this unit.) Students will develop paragraph with information learned in this unit on both the Elizabethan and contemporary theater.)

English Literature - Grades 10-12
"A Look at Elizabethan Society"
Hedy Geller

CURRICULUM CONCEPT:

To understand life in the Elizabethan Age as a preparation for the reading of A Midsummer Night's Dream.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of the social conditions that existed in the Elizabethan Age and to vicariously experience the living and working conditions of the period.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	1. During a simulation of a typical Elizabethan Fair, the student will demonstrate knowledge of the social conditions of the period.
Educational Awareness	2. Given the experience of participating in a simulation of a typical Elizabethan Fair, the student will state determinants needed in analyzing a society.

ACTIVITIES FOR SESSION ONE:

Introduction:
The time allotted for this material is up to the discretion of the instructor. To successfully complete material several sessions will be needed for the research proposed.

How would you give people living in the year 2200 insight into the social conditions of 1973? Elicit: jobs, literature, music, entertainment, architecture, art, food, fashions, etc.

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*The curriculum concept on which this lesson is based is found in the play, Midsummer Night's Dream by Shakespeare.

"A Look at Elizabethan Society"

Tasks

1. Ask students how their individual research into areas of Elizabethan society has helped this period in history become more real.
2. Committees of students will give reports, show pictures, play music, use charts and models to inform the class about the following areas of Elizabethan society:
    a. Classes of society
    b. Markets
    c. Fairs
    d. Pageants
    e. Living conditions in a typical town (e.g., ill-paved streets, overcrowded slums, plagues, vice, etc.)
    f. Government
    g. Humanism
    h. Education (e.g., what schools looked like, subjects taught, holidays, etc.)
    i. Architecture
    j. Furniture
    k. Music (instruments, minstrels, etc.)
    l. Houses (e.g., timber-framed)
    m. Dress
    n. Jobs (e.g., seamen, smithies, glovers, weavers, tinkers, carpenters, bellows-menders, joiners, poets, actors, farmers, etc.)
    o. Life-styles associated with different jobs.

Summary

Students will view a filmstrip prepared by either members of the class, with the aid of the Art Department staff, or by a corporation that will be formed in the school, consisting of a core of students trained in the skills needed to prepare films and filmstrips. To prepare the filmstrip, members of the class will supply pictures taken from the pictorial file of the library and books containing pictures of the areas of Elizabethan society discussed in class.

Resources

The following are titles of books that would aid students in gathering information about the Elizabethan society, or in providing pictures of the time:

Davis, William Stearns - Life in Elizabethan Days, New York: Harper & Row, 1930.
Hills, Catherine Jandine - Shakespeare: His Life, His Times, His Works. New York; McGraw-Hill, 1971.

"A Look at Elizabethan Society"

Quennel, Marjorie, & C.H.B. - A History of Everyday Things in England, I.T.D., Volume II - 1500 to 1799:
London: B.T. Batsford, Ltd., 1954.
Filmstrip on Elizabethan society
Library Resource Center (information and pictures)
Committee reports on Elizabethan society
Record player
Elizabethan music (records)

ACTIVITIES FOR SESSION ONE:

Introduction

Introduce the purpose of the fair. After students have given reports on Elizabethan society and they have committee meetings independent of class time, the students will all participate in a simulation of a typical Elizabethan Fair (see: William Stearns Davis' book: Life in Elizabethan Days - pps. 286 - 290.)

Tasks

The Fair will include:

1. Students wearing home-made costumes depicting the dress of period.
2. Stalls will be set up and students will sell herring and gingerbread they make.
3. Some students will be dressed as minstrels and carry Elizabethan type instruments (home-made) and will recite an Elizabethan ballad. Elizabethan music will be played.
4. Tradesmen will sell their wares (e.g., pewter.)
5. Some students will make meade.
6. Some students will have a puppet show.

Summary

Students will discuss and list the determinants needed in analyzing a society.

Resources

Extensive for the Fair.

EVALUATION

1. Evaluate the students knowledge of social conditions by their demonstrations in the Fair.
2. Ask students to write a one page description of the determinants needed in analyzing a society.

Sample Report*

THE ELIZABETHAN AUDIENCE

When Shakespeare peeped through the curtain at the audience to hear his first play, he looked upon a very motley crew.[1] His audience was a mixed one. There were tradesmen and apprentices, servants and mechanics, soldiers and sailors.[2]

The pit was filled with men and boys. The galleries contained a fair proportion of women, some not too respectable. ". . . in the lords box, or perhaps sitting on the stage, was the young Earl of Southampton with a group of extravagantly dressed gentlemen of fashion. Vendors of nuts and fruits moved about through the crowd."[3] Shakespeare (unlike Jonson, Steele, and many other playwrights during this time), was used to a large, excitable, restless audience that had worked hard for its pennies and did not hesitate to show its feelings if it became bored.[4]

Too often this audience had been pictured as ignorant and rowdy and altogether undesirable. Hamlet said that the groundlings 'for the most part are capable of nothing but inexplicable dumb-shows and noise.' Peele disliked writing for the "' penny-knave's delight.'" The playwrights said almost as much about the actors, but they must have been more annoyed at the habit of apple-eating, nut-cracking, and beer-drinking then apparently went on throughout the performances.[5]

Stephen Gosson, a playwright of the period, has described the whole-hearted enthusiasm with which a London audience settled down to enjoy itself in the theater. 'If the play was a tragedy the susceptible Londoners dissolved into sympathetic tears, "weeping and mourning" with a rich vicarious satisfaction that the woes portrayed on the stage. If the play was a comedy, "they generally take up a wonderful laughter and shout together with one voice . . . ."'[6] For the Elizabethan audience was fond of unusual spectacles and brutal physical suffering. They liked battles and murders, processions and fireworks, ghosts and insanity. They enjoyed the horrid stories of rape and revenge like 'Titus Andronicus'. They would endure seeing Gloucester's eyes torn out, or Hieronymo's tongue torn from his mouth, or a child's brains dashed across the stage.[7]

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*This report goes with Session Two of this unit.

The actors played their parts well for them. (In one scene of Tamburlaine) the Admiral's Company handled a scene with such realism that a bullet miscarried and killed a pregnant woman in the audience.[8]

An Elizabethan play was full of action, but in the final analysis it was not the physical activity that caught and held the emotions of the audience; it was the words.[9] Still, the theater was a meeting-place, a fashionable amusement rather than a place of art.[10]

In our quiet times, it is difficult to find a parallel to the pit of public theaters, but perhaps the audience at a professional ball game comes as near as anything we have to the crowd that assembled in the "Curtain and the Theater."[11]

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1 - Ashley H. Thorndike, Shakespeare's Theater (New York, 1949), p.404.
2 - Kenneth MacGowan and William Melnitz, Golden Ages of the Theater (Englewood Cliffs, New Jersey, 1959), p.80.
3 - Ashley H. Thorndike, Shakespeare's Theater (New York, 1949), p. 80.
4 - Marchette Chute, Shakespeare of London (New York, 1949), p.233.
5 - Kenneth MacGowan and William Melnitz Golden Ages of the Theater (Englewood Cliffs, New Jersey, 1959), p. 80.
6 - Marchette Chute Shakespeare of London (New York, 1949), p.70.
7 - Ashley H. Thorndike op. cit. p. 408-409.
8 - Marchette Chute op. cit. p. 75.

9 - Ibid. p. 89

10 - Allardyce Nicole, History of English Drama, 2 vols. (Great Britain, 1925), p. 9.

11 - Ashley H. Thorndike op cit. p. 408.

English Literature - Grades 10-12
"Fusing Career Education and A Midsummer Night's Dream"
Hedy Geller

CURRICULUM CONCEPT:

To become aware of the universal appeal of Shakespeare's writing by reading and analyzing A Midsummer Night's Dream.

To become aware of the dramatic techniques and elements that contribute to the production of a play.

To gain insight into human nature and interpersonal relationships through literature.*

RELATED CAREER EDUCATION CONCEPT:

To develop the ability to see experience in drama which can relate to one's daily life.

To become aware of the life-styles and jobs of characters in the play.

To become aware of the jobs available in the production of a play.

NOTE TO INSTRUCTOR:

The following unit includes only activities that include career education concepts which can be fused with teaching of Shakespeare's A Midsummer Night's Dream. Thus, in addition to dealing with the universal themes of love, marriage, reality, illusion, friendship, generation gap, reason, imagination presented in this play, the instructor will now be able to fuse career awareness concepts.

Since the following lessons are not complete, but only include career education concepts that can be fused at different appropriate sections of the play, the following activities are additional suggested activities that can be used in teaching the play to enhance the students' understanding and enjoyment of it.

Tasks

1. Video-tape students' dramatization of scenes

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*The curriculum concept on which these lessons are based is found in the play: A Midsummer Night's Dream by Shakespeare.

2. Role playing
3. Students will listen to recording of play by professional actors
4. Students will view the movie version of the play after the reading and study of the play is completed
5. Students will read criticisms of the play and then write their own
6. Students will draw pictures of characters and scenes
7. Students will see pictures done by artists (e.g., Blake) of scenes from the play
8. Students will see a ballet of A Midsummer Night's Dream

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency and Attitudes and Appreciations	1. Given daily quizzes and full period exams, the student will demonstrate his/her understanding of the play.
Educational Awareness and Career Awareness	2. Given the topic sentence: "Theater means panorama or world view," the student will write a well developed paragraph on how this play has widened his/her world view in terms of different life-styles, jobs, human nature and interpersonal relationships.

ACTIVITIES, DAY 1: (Act I, Scene I: To become aware of the situation in Athens)

Introduction:
For what possible reasons might a parent of today disown his child? (Elicit: Discuss generation gap)

Tasks - (career education concept to be fused)
1. Ask students what are the implications in the introductory pages that Egeus views marriage as a business-like fulfillment by an obedient daughter.

Summary
Ask students how the clash depicted in the introduction of the play reflects our own generation gap. (Elicit: parent's disapproval of our friends, career choices, life-styles, etc.)

ACTIVITIES, DAY 2: (Act I, Scene I: To become aware of the situation in Athens)

Introduction

"The course of true love never did run smooth." How can you apply this concept to characters in books, t.v., movies and to your own experiences.

Tasks (the following are career education concepts to be fused with lesson)

1. Students will listen to a recording of this scene by professional actors and observe why Lysander applies this phrase to his own situation.
2. Students will discuss how emotions affect them (e.g., in their school work and on the job, etc.)
3. Ask students what are the characteristics of a good friendship (elicit: loyalty, trust etc.). This discussion will be carried through to a discussion on the characteristics of a good work relationship.

Summary

1. Ask students how love has created a hell out of heaven for all characters in the play.
2. Ask students if love has ever had the same effect on them. This retarded their school work and performance on a part-time job etc.)

ACTIVITIES, DAY 3:(ACT I, Scene II, To be introduced to the Athenian mechanicals)

(Note: The lesson plan for Day 3 is written up in complete form because the entire lesson fuses career education concepts.)

Introduction

The name of each tradesman introduced to us in Act I, scene II is suited to the work he does. Based on our discussion of the jobs of people in Elizabethan society, how can my introductory statement be substantiated? (Elicit: Snug suits a joiner; Snout as a tinker mends kettles with spouts; a flute is a wind instrument and so is a bellow; tailors are traditionally undernourished. Quince is the name of a carpenter's tool. A "bottom" means a spool of thread and is associated with weaver. (This can also lead to a discussion of jobs that have become obsolete.)

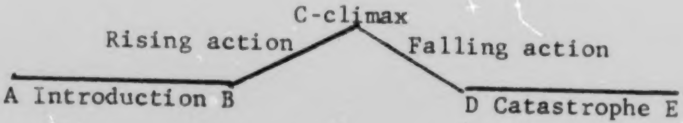
Tasks

1. Video taping of students' dramatization of this scene
2. After scene is dramatized ask students why they think people who have jobs as tradesmen would want to perform in a play.
3. Ask students how the play the Athenian tradesmen are going to present is related to the play A Midsummer Night's Dream. (Elicit: same theme: young love and its conflict with parental authority)
4. Ask students what technical elements of play production are depicted in the scene (elicit: casting, costume, script, etc).

5. Ask students how they would have felt in Bottom's situation when he is rejected for all the additional roles he wants to play.
6. Ask students how Shakespeare enforces the realism of both Bottom and his companions (speak in prose which contrasts with formal poetry lovers used; Bottoms's love of life).

Summary

Ask students to make a chart of what they should include about themselves when introducing themselves to a prospective employer. Students will then review what an introduction to a play consists of based on their discussion of the following diagram:



(Elicit: prepare listener for a play, introduce main characters, set mood and tone, characterize environment). Students will discuss and compare and contrast the introduction of themselves in an interview to an introcution of a play.

ACTIVITIES, DAY 4: (Act II, Scene I: To be introduced to the fair realm.)

Introduction

Students will discuss the effects of war, floods, family conflicts on people's lives.

Tasks (Note: career education concept to be fused).
1. Ask students if they were farmers during Shakespeare's day how the quarrel between Titania and Oberon, King and Queen of Fairyland would affect their livelihood? (Elicit: adverse effects--floods, wasted labor, corn rotted, devastation, disease, frost, seasons mixed-up, cattle died).
2. Students will discuss how to deal with adverse situations in their personal life and on the job.

Summary

How can we compare the effect of the marital discord between Titania and Oberon on the people of the village to the effect marital discord has on the children of feuding parents.

ACTIVITIES, DAY 5: (Act II, Scene II)

(Note: Although this scene primarily deals with the inconstancy of love depicted in the relationships of 4 young lovers, the following career education concept can be fused)

Tasks

1. Ask students how the opening of this scene which describes Titania and her fairies reflect an employer-employee(s) relationship in the real world. (Elicit: Titania designates tasks to those below her in the hierarchy of the fairy world--some fairies will kill worms, some will fight with bats, some will keep back the noisy owl, they all must sing her to sleep, one is a sentinel to protect Titania)

Summary

Students will discuss the presentation of universal themes in the scene (Elicit: reality, will, reason, love, judgement, etc.).

ACTIVITIES, DAY 6: (ACT III, SCENE I: To become aware of problems involved in play production.)

Introduction

Ask students what problems they could foresee in directing a play for the school based on the audience, money allocated, and materials available to them. (Teacher should give students a hypothetical budget and list of equipment that could be used.)

Tasks

1. Ask students what problems Quince is having with his actors. (Elicit: actors properly following cues and dialogue).
2. Ask students what production problems the Athenian mechanicals realize they have when they meet to rehearse their play "Pyramus and Thisbe." (Moonlight, Chink in a wall, ladies will not be able to stand the suicide of Pyramus with a sword, and fear of the lion by ladies in the audience.)
3. Ask students how are these production problems resolved. (Elicit: moonshine produced by lantern and thorn bush, prologue explains suicide).

Summary

Ask students how this scene supports the concept that "the imagination was the best propman and scene designer of them all." for the Elizabethan audience.

ACTIVITIES, DAY 7: (Act III, Scene II)

(Note to teacher: This scene is long and should be covered in several days. The following career education concepts should be fused with the lesson.)

Tasks

1. Students will discuss Puck's statement "Lord what fools these mortals be." (Elicit: inconstancy of man, effects of passion, how emotions can provoke us to act foolishly and ineffectively in our personal lives and on the job, etc.)
2. Students will discuss how Puck's negligence has caused havoc which should lead to a discussion of the consequences of negligence on the part of employers.

Summary

Students will discuss how they would have acted and reacted if they were in the same predicament the four young lovers find themselves in.

ACTIVITIES, DAY 8: (Act IV, Scene I: To examine how the hell of the lovers is changed into a heaven.)

Introduction

Students will discuss different life-styles associated with certain jobs (e.g., actor, secretary, tradesman). Note: parallel World of Work class.

Tasks

1. Students will discuss to what extent Bottom, an Athenian mechanical (weaver) has been able to successfully adapt to the new life-style associated with his new environment (fairyland).
2. Students will discuss how changing one's job necessitates on many occasions the acclimation to a new life-style.
3. Note: dreams are also discussed in this scene and students should discuss the effects of dreams on their reality (dreams of power, fame, success, etc.).

Summary

Students will discuss the concepts of reality and illusion presented in this scene and in their own lives (e.g., a realistic self-appraisal for a career choice opposed to unrealistic goals).

ACTIVITIES, DAY 9: (Act IV, Scene II)

Note: This scene is very brief and should deal with the career education concept that individual task performance is part of effective team work. This can be brought out in a discussion of the Athenian mechanicals concern over Bottom's disappearance and their belief that the play will be spoiled if he doesn't come back since they believe no one in all Athens can play Pyramus except Bottom.

ACTIVITIES, DAYS 10, 11: (Act V, Scene I)

Note: This is the conclusion of the play in which all strands are woven together. The following career education concepts can be infused.

Tasks

1. Students will discuss Theseus' speech about the uses of imagination: "The lunatic, the lover, and the poet are of imagination all compact" This discussion can evolve into a discussion of the positive uses of the imagination in different jobs (e.g., costume design, director, writer, composer, artist, etc.).
2. Based on a previous lesson of the job of a theater critic, the student will write a critique of the play performed by the Athenian mechanicals in this scene.

Summary

Students will rewrite the ending of this play to give them the vicarious experience of being a playwright.

RESOURCES:

Video tape equipment, record of play, record player, film of play, projector, library (critiques of play and pictures).

EVALUATION:

Note to teacher: Since this unit covers about three weeks of class time evaluations will take place at different points of the unit which is left to the discretion of the teacher. However, these are suggested evaluations:

1. Daily quizzes
2. Full period exams (true and false, multiple choice, completion, identifications and essays.)
3. Based on the reading of the play, students will write a well developed paragraph on the following topic sentence: Theater means panorama or world view. (Students will discuss how this play has widened their world views in terms of life-styles, human nature, jobs, and interrelationships.

English/Literature - Grade 9
"Airing My Own Thoughts"
Stanley Solomon

CURRICULUM CONCEPT:

To understand that an aspect of communication is the ability to explain one's reactions to a situation.*

RELATED CAREER EDUCATION CONCEPT:

To understand that what appears to be a solution to an on-job situation might not be valid for every individual.

CAREER EDUCATION OBJECTIVES:

Given a list of possible solutions to the conflict between Anne and Captain Keller, the student will produce a 250 word essay explaining which of the solutions he would find most feasible for himself and explaining his reactions.

ACTIVITIES:

Introduction

Ask class "why can't the dress manufacturer produce just one size of clothing?" (Expected answer--not everyone is alike--not everyone can wear the same things)--extend this to concept that solution to problem may not be valid for all people--i.e., there is no universal solution. Suggest to class that they have just seen a listing of solutions to a worker-boss conflict and they have mentally eliminated those with which they do not feel comfortable. Ask them to explain their reactions in a written essay of 250 words.

Tasks

Remainder of period will be spent in production of the written essays.

Summary

Ask class to think of other instances where a possible "solution" to a problem is not universally applicable.

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*The curriculum concept on which this lesson is based is found in the textbook: Title: Ideas and Patterns in Literature, "The Miracle Worker", Sutton, Silverstone and Smith, Harcourt, Brace and World, New York, 1970.

"Airing My Own Thoughts"

RESOURCES

None

EVALUATION:

Students will produce 250 word essays evaluating the various solutions to the Sullivan-Keller conflict. Essays will be collected and graded according to acceptable standards of content and form. Essays will be returned with time allotted for appropriate revision and discussion.

English/Literature - Grade 9
"Soothing Troubled Waters"
Stanley Solomon

CURRICULUM CONCEPT:

To be aware of how airing of a grievance can help bring about a solution.*

RELATED CAREER EDUCATION CONCEPT:

To understand that boss-worker conflicts can be resolved by means of a grievance panel.

CAREER EDUCATION OBJECTIVE:

Given an understanding of the operation of a grievance arbitration board, the students will attempt to resolve the conflict between Anne Sullivan and Captain Keller.

SUGGESTED ACTIVITIES:

Introduction

1. Introduce concept of role-playing and explain its purpose--i.e., to help members analyze and deal with a conflict or tension-producing situation.
2. Distribute "briefing sheet" which will clarify the conflict (as elicited in preceding lesson) and will suggest some qualities of the roles to be enacted.
3. Have class members volunteer to take the following roles:
    a. Anne Sullivan
    b. Captain Keller
    c. Leader and members of grievance board

    Note: Thus students who do not play a role will serve as an evaluative committee to judge the quality of the role playing activity.

Tasks

Have class improvise in the roles of Anne and Captain Keller before a grievance arbitration board. "Anne" and "the Captain" will present their arguments and then the board will suggest possible courses of action (which a class secretary can list on the board, if necessary).

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*The curriculum concept on which this lesson is based is found in the textwork: Ideas and Patterns in Literature, "The Miracle Worker", Sutton, Silverstone, Smith, Harcourt, Brace and World, Inc., New York, 1970.

An interesting supplementary activity might be to have "Anne" and "the Captain" reverse roles and run the exercise again. (Note to teacher: Role playing is a valid but sophisticated activity. Some research into the teaching technique might be worthwhile before attempting this lesson so that procedures, techniques, etc., can be clarified in the teacher's mind.)

Summary
Lead the class into seeing that a worker has many alternatives open to him in solving a conflict with his boss. Quitting is the least desirable of the alternatives.

RESOURCES:

Teacher will make up a briefing sheet in which the essential conflict and personality differences that exist between Anne and her employer are clarified so that the actors can get a better grasp on their roles. It would also be wise to include a brief analysis of the role of an arbitration board.

EVALUATION:

Students will be able to indicate from memory at least 2 possible courses of action that are available to a worker involved in a worker-boss conflict.

English/Literature - Grade 9
"Feature Bout: Worker vs. Boss!"
Stanley Solomon

CURRICULUM CONCEPT:

To understand the conflict that exists between Anne Sullivan and Captain Keller in the play The Miracle Worker.*

RELATED CAREER EDUCATION CONCEPT:

To be aware and to be able to solve similar conflicts that can arise in a typical boss-worker relationship.

THEMES AND OBJECTIVES:

Themes	Objectives
Employability Skills	Given an understanding of the conflict that exists between Anne and her employer, the student will describe several alternate methods for handling this problem.

UNIT RATIONALE:

This series of lessons is intended as a Career Education mini-unit based upon William Gibon's play, The Miracle Worker. It was written to demonstrate how career education can be infused into a work of literature. The teacher may wish to expand upon this unit or to devise similar units for other aspects of the play.

The Unit includes the following lessons:

Lesson 1 -- Feature Bout--Worker vs. Boss!
Lesson 2 -- Soothing Troubled Waters
Lesson 3 -- Airing My Own Thoughts

ACTIVITIES:

Introduction

1. Elicit concept that Anne Sullivan and her employer, Captain Keller, are constantly in conflict (establish concept of conflict).

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*The curriculum concept on which this lesson is based is found in the textbook: Ideas and Patterns in Literature I, "The Miracle Worker," Sutton, Silverstone, Smith, Harcourt, Brace and World, Inc., New York 1970.

2. Ascertain the reasons for the conflict (i.e., Anne's stubborn attitude and Keller's dogmatic approach).
3. Ask class to find parallel in modern job situation--i.e., where one would find workers and bosses in conflict.

Tasks
1. After class has enumerated a set of situations in which worker-boss conflict can arise, ask them what solutions to this problem are available.
2. Be sure that among the solutions is included the concept of a grievance arbitration board (as this is the basis of the next lesson).

   Ascertain exactly what it is that a grievance arbitration does--i.e., how does it operate? Who is on it, etc.

Summary:
If you were a co-worker with Anne Sullivan and realized she was having difficulties with her employer, what would you recommend that she do rather than quit.

RESOURCES:

Act II, Scenes 2 and 4 in Gibson's The Miracle Worker: have class re-read these 2 scenes with objective of analyzing the conflict between Anne and Captain Keller.

EVALUATION:

Students will be able to suggest several methods of dealing with a boss-worker conflict. Students will be able to explain the purposes and operation of a grievance panel.

English Literature - Grade 10
"Exploring A Dancer's Role In The Works of Shakespeare"
Arthur Kirson

CURRICULUM CONCEPT:

To see how music and dance tell the story of "Romeo and Juliet". (Prior to viewing either a live or filmed performance of the ballet by Prokofieff; after studying the play.)*

RELATED CAREER EDUCATION CONCEPT:

To discover the talents needed and the role performed by the dancer.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. Given the inspiration of Nureyev, the student will list possible jobs in a ballet career.
Economic Awareness	2. The student will list dance career opportunities in their city.
Attitudes and Appreciations	3. The student will list the ways in which they think dance (ballet and body movement) can tell the story of the (a) play.

ACTIVITIES:

Introduction

The teacher will either read aloud or provide rexographed copies (or tell) the brief excerpt from the autobiography of Rudolf Nureyev depicting his defection from the Soviet Union and his reasons for it, most specifically his desire to broaden his scope as a dancer.

Tasks

1. The students will compile a list of any ballet artists of whom they have heard. The teacher will supplement the list and show pictures

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*The curriculum concept on which this lesson is based is Romeo and Juliet by William Shakespeare.

of some, preferably in training or on stage. Sample List:
   a. Rudolf Nureyev
   b. Dame Margo Fonteyn
   c. Edward Vilella
   d. Melissa Hayden
   e. Kay Mazzo

2. The student will list some famous ballet companies. Sample list:
   a. Royal Ballet
   b. Bolshoi
   c. Stuttgart
   d. New York City
   e. Joffrey
   f. American Ballet Theatre
3. The student will compile a list of some famous choreographers and dance masters. Sample list:
   a. Robert MacMillan
   b. Ballanchine
   c. Jerome Robbins
   d. John Tara

   Question: For how long would you think a ballet performer must train? (Answer--always.)

   Question: What are the primary ballet careers we have seen?
   List:
   a. dancer
   b. choreographer
   c. dance master
   d. dance creator
4. The student will use the newspaper and additional resource material to compile a list of possible ballet careers in their own city or in its environs. Sample answer for New York:
   a. New York City Ballet
   b. Joffrey--City Center Ballet
   c. Alvin Ailey Dance Company
   d. Martha Graham
   e. Radio City Music Hall
5. The student will summarize the play in a written sequence of events.
6. Each student will tell or demonstrate how he feels certain gestures will tell a particular point from the play.

Summary
None provided.

RESOURCES

Newspapers, pictures, programs, "Romeo" script.

EVALUATION:

1. The student will list eight possible jobs in ballet career and describe in detail the skill competency needed for each.
2. Judge the student's ability to perform tasks 4 and 6.

American Literature - Grade 10
"Persuading Others"
Michael Dunn

CURRICULUM CONCEPT:

To understand the effect on the revolution of Patrick Henry's speech in the Virginia Convention.*

RELATED CAREER EDUCATION CONCEPT:

To describe factors one can use to influence others.

THEMES AND OBJECTIVES:

Theme	Objective
Self Awareness	The student will describe two ways in which he is able to influence others.

ACTIVITIES:

Introduction

Refer to recent speech class may have heard and elicit how and why speech affected them (content and presentation). Have students identify career skills involved: thinking, speaking, writing.

Tasks

1. Read Patrick Henry's speech or play it on a record.
2. Elicit
    a. logical structure of speech (outline)
    b. appeal of text to those initially opposed
    c. common humanity that Henry draws upon
    d. persuasive technique that Henry employs
3. Give students the following homework assignment:
    a. Tape an effective TV commercial (audio); play it to class for evaluation.
    b. Choose topic and speak on it; class criticize content and technique.
    c. Bring in piece of inspirational music or art.
    d. Find another example of a speech influencing history.

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*The curriculum concept on which this lesson is based is Patrick Henry's speech in the Virginia Convention.

4. Ask the question: What makes Patric Henry's speech an effective revolutionary instrument and how do you influence others to your way of thinking?
5. Ask students: How can you influence others to accept your tentative career choice? Are there problems?

Summary

What do you think would be the effect of Patrick Henry's speech on the Virginia legislature? What employable skills did Patrick Henry draw upon for his effect?

Music and Art application: refer to revolutionary pieces of music and art, instruments, sounds, color combinations; play piece, show picture.

RESOURCES:

Textbook, pictures, music.

EVALUATION:

List two ways you have used to try and influence others and describe their effect.

American Literature - Grades 9, 10
"Decision Roads"
Michael Dunn
Michael Weingarten

CURRICULUM CONCEPT:

To understand the symbolism in poetry.*

RELATED CAREER EDUCATION CONCEPT:

To understand the components of the decision-making process as evidenced in "The Road Not Taken" by Robert Frost.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness and Decision Making	The student will describe the decision making process used by the main character of the poem.
Self Awareness	The student will describe his own decision making process in making career choices.

ACTIVITIES FOR SESSION ONE:

Introduction

Because of the affective nature of this session, there should be no introduction but immediately proceed to do the task.

Tasks

The teacher will ask for approximately 10 student volunteers to form a circle in the middle of the room (if the class is very large or if moveable furniture is not available, the 10 students can form a panel in front of the classroom). The rest of the class will surround the small circle of volunteers. The teacher will ask the volunteers to identify their job preference (the teacher should stress that this career preference is based on present thoughts and that it is normal for people to change their career preference periodically). After each student has identified his job preference, the teacher will question one of the students about:

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*The curriculum concept on which this lesson is based is found in the book: The Road Not Taken by Robert Frost.

1. the obstacles he must hurdle before he reaches his goal.
2. the risks he will face on the way to his goal and after he has reached his goal.
3. why has he chosen that particular goal?

The teacher will stop the small group discussion, leaving sufficient time for the class to discuss the components of the decision making process that arose in the small group.

Summary

Summarize the various decision-making processes used by the group. For homework, the students will read "The Road Not Taken" and be asked to look for the components of the decision making process that are used by the main character.

ACTIVITIES FOR SESSION TWO:

Introduction

Have students think back on their lives. What important decisions have they made? What important decisions will they make in the future? Stress that as the poem is reviewed that the student is to assess how important decisions can be evaluated.

Tasks

1. Review vocabulary words in the poem (diverge, undergrowth, wanted, trodden). Then have students review poem.
2. After the poem is discussed in class stress the following:
   a. In life certain key decisions must be made.
   b. One never knows if he has made the "right" choice.
   c. There are ways in which the effectiveness of alternatives can be determined.
   d. We can evaluate a choice and benefit from our evaluation.
3. The following areas can serve as the focus of small group discussion.
   a. Describe the choice facing the traveler.
   b. Tell what the poet might have meant by the "road".
   c. Explain how a poet uses one idea to represent another.
   d. What "roads" have you already not taken in life?
   e. May you yet take one of those rejected?
   f. How will you be able to evaluate your career?
4. Personal discussion for future in career choice can be explored:
   a. How did the traveler know he'd taken the right road? (result)
   b. How could he be sure?
   c. Will you be sure when you are 30 that you have embarked on the right career?
   d. What checks can you make? (salary, condition, spirit, satisfaction, advancement).
   e. What does the poet mean by the last line in the poem?

"Decision Roads"

Summary

Summarize the two sessions and talk about how one can control the "difference" in one's life.

EVALUATION:

1. Have students in 100 words describe the decision making process used by the main character of the poem.
2. Have students identify one decision they've made with respect to career choices and describe how that decision was made.

American Literature - Grade 10
"Societal Structure Affects Lives"
Muriel San

CURRICULUM CONCEPT:

To appreciate the first psychological American novel in its historical context, and to discover its relevance to our society. (Psychological concepts and social structures implied).*

RELATED CAREER EDUCATION CONCEPT:

To describe how the structure of a society affects all aspects of our lives.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	The student will describe elements in the Puritan social structure that restrict or influence an individual's actions.

ACTIVITIES:

Introduction
Students will have read Chapters 1 and 2 in the text. Discuss information in these chapters eliciting reasons a society finds it necessary to construct a prison as its first task. Include in discussion choice of professions available in Puritan society, choice of life styles, kind of family life (choice of mate), description of acceptable (female, male) roles. Explain that the laws of Puritan society dictated the actions of the individual and that students will research specific laws.

Tasks
1. Divide class into committees (time allotted: a few days). Research specific
    a. Puritan laws.
    b. Aspects of Puritan religion and its affect on the Puritan society (historical development of the religion implicit)
    c. Puritan occupations/work ethic/trades
2. Indicate to class that this research will culminate in a project of a model of a Puritan community.

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*The curriculum concept on which this lesson is based is found in The Scarlet Letter by Nathaniel Hawthorne.

3. Provide time for each committee to report to class on their findings. For each committee the following should be stressed:
   Laws: behavior and punishments.
   Religion: how it relates to work ethic. Describe rituals. Why did the Puritans come to America in the first place?
   Occupations: What did the people have to do in order to survive? What skills were necessary; who did the work (division of labor)? What functions, if any, did children and adolescents perform?
4. Ask students to relate the structure of today's society and how that affects life styles and our occupational choices.

Summary

Culminate discussion by relating findings of committee to the total structure of Puritan society and to our society and occupational choice.

EVALUATION:

1. The student will list those elements that influenced the lives of the Puritans as revealed by research and discussion.
2. The student will describe in paragraph form how those elements
2. restricted or influenced an individual's actions then and how the present day structure affects our lives especially occupation choice, if it does.

American Literature - Grade 10
"How Societal Forces Change Individuals"
Muriel San

CURRICULUM CONCEPT:

To appreciate the first psychological American novel in its historical context, and to discover its relevance to our society.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of how certain forces in society cause an individual to change.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. Given a list of women's roles/careers, the student will identify those roles/careers that demonstrate change.
Career Awareness	2. Given roles that are unchanged, the student will classify and describe how some roles might overlap.
Attitudes and Appreciations	3. The student will describe problems inherent in change.
Attitudes and Appreciations	4. The student will describe the forces that effect change.

ACTIVITIES:

Introduction

This lesson will encompass an overview of Hester in terms of the change she goes through in the novel. (Implicit in this lesson is the fact that if Hester were alive today, she would be at the head of a Women's Liberation group. The nucleus for change is contained herein.

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*The curriculum concept on which this lesson is based is found in The Scarlet Letter by Nathaniel Hawthorne.

"How Societal Forces Change Individuals"

Tasks

1. To motivate the students ask: What makes people change?
    a. experience
    b. economics
    c. trauma (death, illness, accidents)
    d. physical environment: geography, climate.
2. Elicit from the class how Hester has changed: her internal growth and causes.
    a. isolation
    b. freedom of a broken law
    c. freedom of speculation
    d. concepts of freedom inherent in the above
3. Have students consider why or in what way Hester's isolation causes her to be free? (Her society was not working for her.)
4. Have students identify what changes have occurred in our society that affect women's roles. How did this come about? How do these changes represent a change for the better? For the worse?
5. Focus the last part of the lesson on the changing focus on women's careers and the effects this is having on society.

Summary

If you were Hester, what would you have done? What changes might you undergo? Which society would you prefer to live in? Hester's or ours? Why?

EVALUATION:

Part I: Using a list of various roles of women from period of novel to today the students will choose those roles that reflect our changing society.

Sample list:

Mother
Cook
tennis pro
wife
clerk-typist
secretary
educator
clothes-maker
nurse
weaver

bus-driver
bartender
switchboard operator
entertainer
lab technician
writer
artist
doctor
lawyer
candlemaker

Part II: Essays and short paragraphs

A. Students will briefly group those roles that are unchanged. They will state why they think some roles are unchanged and why they seem to overlap.

B. Students will describe problems inherent in change (see question 4).
C. The student will describe forces that effect change and relate these forces to our present society (see tasks 1, 2, 3).

American Literature - Grade 10
"Understanding Our Emotions And How They Affect Our Decisions"
Muriel San

CURRICULUM CONCEPT:

To learn how emotional forces shaped the lives of Hester, Dimmesdale, and Chillingworth.*

RELATED CAREER EDUCATION CONCEPT:

To understand how emotions affect decisions and actions in our lives.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	1. Given the text The Scarlet Letter, the student will identify those emotions affecting the decisions of each of the main characters in the novel.
Attitudes and Appreciations and Self Awareness	2. The student will describe from his own personal experience how various emotions have affected his decisions/actions.
Decision Making Skills and Attitudes and Appreciations	3. The student will state how he might be affected in the future by emotions in making life choices.
Decision Making Skills and Attitudes and Appreciations	4. The student will distinquish between those factors/emotions necessary in making decisions and those factors/emotions that cloud reason.

ACTIVITIES:

Introduction

Motivational questions to be raised by the teacher.

1. Through brainstorming ask question of students "What do you want out of life?" A student will list class responses on blackboard. Students will transcribe these responses to sheets of paper handed to them.

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*The curriculum concept on which this lesson is based is found in The Scarlet Letter by Nathaniel Hawthorne.

2. Have students respond to second question: "How will you get it?" Students will select those items that are material (house, car, boat, money) and those items that are non-material (love, happiness, freedom, health) and make two lists.

Tasks

1. Lead a discussion in response to question 2 above. This discussion will concern itself with certain problems, such as:
   a. What do we have to do to achieve these goals?
   b. What problems can we foresee that might delay us, or stop us or block us from getting what we want? Hopefully, the students will raise this problem. If they do not, the teacher will focus on this problem in terms of the main characters in the novel The Scarlet Letter.
2. Through improvisation have two groups of three students each perform as follows:
   First Situation: Group A, Directions - Three people, 1 female, 2 males, working in an office. They are busy working. They are interested in doing their work so they can be appreciated, and productive. Dialogue improvised - concerned with work tasks, (some personal talk); these people are flexible, considerate, and accommodating.
   Second Situation: Group B, Directions - Same as in Group A, one character, the female, loves another character, and displays love for that person. The second person displays hatred for the loved person. The loved person displays guilt (perhaps he is a married man).
   Directions to students after improvisations:
   Re: Group B - Question:
   How did the emotions displayed affect the actions of the people in the office. In what ways does the first group contrast/compare with the second group. Implicit is: direction of energy, quality of productivity and who was achieving what. Ask role playing students: What did you want? Did you get it? What blocked it?

Summary

Culmination of lesson by a restating of the ways in which emotions affect decisions. Statement as to which qualities (emotional/rational) are necessary in decision-making and life goals. Summary to be elicited from students.

RESOURCES:

Text of The Scarlet Letter.

EVALUATION:

1. The student will list the main characters in The Scarlet Letter and identify those emotions which affected the decisions of each.
2. The student will describe personal experience where his emotions have affected his decisions.

American Literature - Grade 10
"Past, Present, and Future Societal Structures"
Muriel San

CURRICULUM CONCEPT:

To understand The Scarlet Letter in its totality as a vehicle that points to an understanding of how every society works.*

RELATED CAREER EDUCATION CONCEPT:

To describe how the concrete structures erected by a society relate to the social aspect of that society.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	The student will construct models of a Puritan community, of our present day community, and of a community of the future.
Skill Competency	Students will state their reasons for the specific design of their model structures.
Attitudes and Appreciations	Students will compare and contrast the past with the present and future, focusing on the concept of prisons as a model of an institution which is central to our society.

ACTIVITIES:

Introduction
1. These activities are a culmination of the previous three lessons. During the teaching of the unit the art teacher of these students will be working with them in the three-dimensional construction of the three communities described in the first objective.

Tasks
1. Split the students into three groups. Each group will function

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*The curriculum concept on which this lesson is based is found in The Scarlet Letter by Nathaniel Hawthorne as a working unit to construct a model community. The three groups will construct three different communities.

2. Have students keep a log (one member of each group will be elected for this task) for the purpose of understanding the dynamics of group interaction, e.g. how decisions were made, and why they were made. (For example, why would the scaffold be placed in the middle of the model Puritan town?)
3. After models have been built have them presented in the class. The various logs will be shared. Students will be instructed to ask questions of each other relative to reasons for specific designs (see second objective).
4. As the final activity in this series of lessons, have students refer back to research they did in this lesson and the first lesson of this series. Have one student make three columns on the blackboard. Using the concept of punitive institutions have students list differences or similarities found in each period of time as specified by their models (see third objective).
5. Have students identify the occupations in these various periods which were affected by changes in the societal structure.

Summary

1. Have students relate differences and similarities resulting from task 4 to historic, social and economic forces and re-state how their lives are influenced by these forces.

RESOURCES:

Art department and materials necessary for construction
Library
History department

EVALUATION:

1. Assess the product produced when students constructed the three models of communities of past, present and future during the lesson.
2. Have students list reasons for choice of design and further evaluate the processes involved, e.g. what considerations were necessary to evolve their design.
3. Have students summarize in a written essay specific examples based on their work and research regarding past, present and future models.

American Literature - Grades 10-11
"Developing Decision Making Skills"
Muriel San

CURRICULUM CONCEPT:

To study the text of A Story About Hollywood and contrast it with the film in order to better understand the two art forms.*

RELATED CAREER EDUCATION CONCEPT:

To identify factors which influence decisions made in any setting which include an emphasis on career selection.

THEMES AND OBJECTIVES:

Themes	Objectives
Decision Making Skills	1. The student will identify components of decision-making.
Educational Awareness	2. The student will list the considerations of the director, composer, set designer, etc., in adapting a novel to a film.
Career Awareness	3. The student will describe as many careers possible that relate to the movie industry and were listed in their answer to objective 2.
Skill Competency	4. The student will culminate this unit by writing and producing several scenes of their choice.
Self Awareness	5. The student will list their reasons for their choices in objective 4 and will describe the process that occurred in making their decisions.

Introduction

This lesson (unit) should take several days, perhaps a week, and follows teaching of the text. One of the summaries of the text will have already focused on those factors which affect change in an individual's life view, values, etc. (e.g. personal experiences in the insane world of battle).

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* The curriculum concept on which this lesson is based is found in The Red Badge of Courage by Stephen Crane. Also the text and commercial film A Story About Hollywood by Lillian Ross, Doubleday, New York, 1952.

From this concept would grow the necessity to pin-point those elements that go into decision-making.

Aim: To understand the factors that were involved in Crane's writing of his short novel.

Note to teacher: In each case, for the author of the text, the director of the film, and the student himself, 4 broad categories involving decision making will be used. These are as follows:

A. Personal (biographical rationale)
B. Values (personal, social, etc.)
C. Technical aspects and problems to be considered
D. Interpersonal aspects and problems to be considered

Tasks

1. To elicit and list under above categories what was involved in Crane's writing of this novel. For instance: Students list for author under category A: environmental, genetic, historic factors that influence his choice (they will have had biographical data, and also will have grounding in the historic times).
   Category B: Life-style elected. Does author want popularity--a best seller? Is he involved in a particular attitude or philosophy? Does he wish to influence people?
   Category C: How should the writing of the novel be approached? How long should it be? How old should his hero be? etc.
   Category D: Which publisher should the author solicit? His wife and children want him to spend more time with them. His wife believes he should be out plowing the fields. How does he consider what is important? What compromises does he make to satisfy his publisher? His family?

2. Instruct students that they will see the film of the book they read. Students will note contrasts and similarities they see in the film. Students will be told that they will be required to identify factors that influence the director, composer, set designer, etc. using the same categories used for the author as in Task 1.

   SHOW THE FILM

3. Students will list considerations necessary for various members of the film company. Helpful to this activity is the Lillian Ross book which is a day by day account of the filming of Red Badge of Courage. Student reads selections to class if book not available to all. When Interpersonal Category D is elicited--Question: Which person (author, director, etc.) had greater problems in making decisions? Or which person had to make more compromises? Students will become aware of the technical crew, artists, musicians, camera men, producer, producer's wife as an influence. Vastness of problems in putting a movie together, Team Teaching, (music, art) is possible here).
   Question: How helpful is it to know what kinds of careers are avilable in order for you to make decisions? Students will make two lists: one list of careers vocations jobs in film industry they were aware of; second list of careers, vocations, jobs they were unaware of.

4. For the following activity, refer to Values Clarification by Simon, Howe, Kirschenboum (Hart Publishing Company, New York) 1972, pp. 281-286:

"The Fall-out shelter problem: This is a similuated problem solving exercise. It raises many values issues which the student must attempt to work through in a rational manner. We will learn how our values differ; how hard it is to objectively determine the "best: values; and how often we have trouble listening to people whose beliefs are different from our own.

The class is divided into groups of 6 or 7 who then sit together. The teacher presents the problem: "Your group are members of a department in Washington, D.C. that is in charge of experimental stations in the far outposts of civilization. Suddenly the Third World War breaks out and bombs begin dropping. Places all across the globe are being destroyed. People are heading for whatever fallout shelters are available. You receive a desperate call from one of your experimental stations, asking for help.

It seems there are ten people but there is only enough space, air, food, and water in their fallout shelter for six people for a period of three months--which is how long they estimate they can safely stay down there. They realize that if they have to decide among themselves which six go into the shelter, they are likely to become irrational and begin fighting. So they have divided to call your department, their superiors and leave the decision to you. They will abide by your decision.

But each of you has to quickly get ready to head down to your own fallout shelter. So all you have time for is to get superficial descriptions of the ten people. You have half-an-hour to make your decision, then you will have to go to your own shelter.

So, as a group you now have a half hour to decide which four of the ten have to be eliminated from the shelter. Before you begin, I want to impress upon you two important considerations. It is entirely possible that the 6 people you choose to stay in the shelter might be the only six people left to start the human race all over again. This choice, therefore, is very important. Do not allow yourself to be swayed by pressure from others in the group. Try to make the best choices possible. On the other hand, if you do not make a choice in half-an-hour, then you are, in fact, choosing to let the ten people fight it among themselves, with the possibility that more than 4 might perish. You have exactly one half-hour. Here is all you know about the ten people:

1. Bookkeeper; 31 years old.
2. His wife; six months pregnant
3. Black militant; second year medical student
4. Famous historian-author; 42 years old

5. Hollywood starlette; singer, dancer
6. Bio-chemist
7. Rabbi, 54 years old
8. Olympic athlete; all sports
9. college co-ed
10. policeman with gun (they cannot be separated)

The teacher distributes copies of this list, and the students begin. The teacher gives 15, 10, 5 and 1 minute warnings and then stops the groups exactly after half-an-hour. Each group can then share its selection with the other groups and perhaps argue a bit more, if there is time.

Then the teacher asks students to try to disregard the content of the activity and to examine the process and the values implications. Teacher asks questions like:

a) How would you listen to the others in your group?
b) Did you allow yourself to be pressured into changing your mind?
c) Were you so stubborn that the group couldn't reach a decision?
d) Did you feel you had the right to answer?
e) What do your own selections say to you about your values?

These questions may be thought about or written about privately, or they may be discussed in the small groups. Descriptions of the 10 people can be changed to introduce additional value issues."

5. Students will now list--using same four categories as in "Suggested Activity"--those factors involved in their decisions re: Fallout Shelter Problem.

Summary

Culminate lessons by stating that students should be able to choose parts of the novel and re-write scenes as screen plays, giving reasons for their decisions. The students will list their reasons for their choices and will describe the process that occurred in making their decisions. Note: Teacher may decide not to use same text--but to suggest other works for this summary activity.

RESOURCES:

Text, film: Red Badge of Courage, Lillian Ross' book, Picture: A Story about Hollywood.

Interdepartmental resources (music, art, re: movie music, film technique, etc.)

"Developing Decision Making Skills"

EVALUATION:

1. The student will list the major steps in rational decision-making.
2. The student will select one career associated with the movie industry.
3. The student will describe in detail the casting necessary to film a scene that he has written.

American Literature - Grades 10-11
"Perceptions of Success"
Muriel San

CURRICULUM CONCEPT:

To discuss the meaning or concept of success by comparing two poems of different styles.*

RELATED CAREER EDUCATION CONCEPT:

To determine what "success" means to a group observing an individual and what it might mean to the individual himself.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	1. The student will list which individuals they feel are most successful and state their reasons for their choices. (Group observing individual)
Self Awareness Attitudes and Appreciations	2. The student will describe their own "successes" (Individual meaning of "success")

ACTIVITIES:

Introduction
Motivation: A baseball player earns $150,000 a year; a college professor earns $25,000 a year; a factory worker earns $7,000 a year. Which would you consider to be more successful?

Teacher lists responses e.g.:	
15	for baseball player
6	for college professor
2	for factory worker

Reasons for choices are elicited for each category - and placed on blackboard in 3 columns. (See task 4).

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* The curriculum concept on which this lesson is based is found in "Success is Counted Sweetest" by Emily Dickinson and "Richard Cory" by Edwin Arlington Robinson.

"Perceptions of Success"

Teacher: Let's keep your responses in mind as we read the poetry. (Teacher might assign the reading the night before - so students will have been exposed to material)

Tasks

1. Teacher reads out loud; students read silently, poem "Richard Cory"

2. Teacher states, "Why do you think Robinson used the pronoun "we" rather than the pronoun "I" throughout the poem? That is, why does he describe the reaction of a group of people to Richard Cory rather than the reaction of one sensitive individual? (To answer this question, it may help to re-read the poem substituting "I" wherever "we" occurs.)

3. Teacher reads aloud, students read silently - "Success Is Counted Sweetest"

   Question; a) Why is Success "counted sweetest
   By those who ne'er succeed"?
   b) Why is "he, defeated, dying," able to
   "tell the definition.... of victory" better
   than the "purple host who took the flag today"?
   (Is "victory" the same as "success"?)

4. Teacher: Let us see if what these poets say is true by looking at the lists we made. How might we now treat this list? Can we add to it? What meaning does it now have for us? What does the list not tell us?

5. Students are now asked to describe instances of what they did or accomplished that they consider successful. (Implicit in this Task is comparison with Task 4) For some students, a better method for getting this information is to have student tell what someone else said about him, his work, his actions, that in some way expressed belief or acknowledgement of a "success" for that particular student.

Summary

Teacher leads discussion making the following points--

Question: What are both poets telling us?
Answer : Success is paradoxical, nebulous. One person's view of success is different from another's. The individual being observed by the group does not necessarily see himself the same way the group sees him. The individual's definition of success (or failure) is his own.

RESOURCES:

Adventures in American Literature, Classic Edition (Anthology)
(Harcourt, Brace and World, Inc., N. Y.) 1968

SUCCESS IS COUNTED SWEETEST by Emily Dickinson

Success is counted sweetest
By those who ne'er succeed.
To comprehend a nectar
Requires sorest need.

Not one of all the purple host
Who took the flag today
Can tell the definition,
So clear, of victory,

As he, defeated, dying,
On whose forbidden ear
The distant strains of triumph
Break, agonized and clear.

RICHARD CORY by Edwin Arlington Robinson

Whenever Richard Cory went downtown,
 We people on the pavement looked at him:
He was a gentleman from sole to crown,
 Clean-favored, and imperially slim.

And he was always quietly arrayed,
 And he was always human when he talked;
But still he fluttered pulses when he said,
 "Good morning," and he glittered when he walked.

And he was rich -- yes, richer than a king --
 And admirably schooled in every grace:
In fine, we thought that he was everything
 To make us wish that we were in his place.

So on we worked, and waited for the light,
 And went without the meat, and cursed the bread;
And Richard Cory, one calm summer night,
 Went home and put a bullet through his head.

"Perceptions of Success"

EVALUATION:

Students will state whether they had to re-evaluate their ideas about themselves and describe specifically what their ideas about success were, and what they are now.

In terms of their own ideas of what success is the student will list eight persons he believes to be successful and give the reasons why.

American Literature - Grade 11
"Costuming Careers"
Arthur Kirson

CURRICULUM CONCEPT:

To study the Eugene O'Neill play, "Mourning Becomes Electra," as dramatic literature and as an historic comment.*

RELATED CAREER EDUCATION CONCEPT:

To compile a list of theatrical and non-theatrical careers contingent upon costuming.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	Given a brief background in "Victorians," the student will identify and/or copy characteristics of period costume (1865).
Skill Competency	The student will identify the technical tasks in costuming a period play.
Career Awareness	The student will describe the supplies, (textiles,mechanical, etc.) essential to costume work.
Employability Skills	The student will identify the interdependencies among people costuming a play.
Career Awareness	The student will describe non-theatrical occupations given costuming skills he used.
Self Awareness	The student will identify personal interests which contribute to costuming.

ACTIVITIES:

Introduction

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*The curriculum concept is based on Mourning Becomes Electra by Eugene O'Neill.

"Costuming Careers"

1. Indicate the aim of this lesson to the students and the reason for studying.
2. Circulate photographs and paintings and show (when possible) a brief film or slide presentation providing examples of clothing worn in 1865. Elicit a list of characteristics of the costumes from the student.

Tasks

1. Elicit a list of fabrics and colors which were outstanding in demonstration. Examples:

Fabrics	Colors
wool	red
velvet	brown
silk	mauve

2. Briefly discuss a particular scene from the play and ask students to specify the colors, textures, and styles they would use to costume one of the involved characters. Ask the question why would you costume the character (e.g., Lavinia) as you described? Responses might include: mood of play, mood of scene, mood of character, historic value, etc.
3. Compile a list (elicited from class,) of the people needed to costume a play. Examples: designer, researcher, seamstress, wardrobe mistress, costume company.
4. Ask for responses to the question, What people would you need who are not directly involved in your production? Sample answers:
    1) textile mill workers
        a. fabric makers
        b. fabric cutters
    2) dyers, dye producers
    3) pattern makers and cutters
    4) importers
5. Have students consider how one might work in costuming without being in the theatre?
   Sample answers: 1) Designing 2) Tailoring

Summary

1. Have students look at how many diverse careers were mentioned in the lesson which might interest them.
2. Ask each student to explain how his own particular interest (vocational or avocational) would be "absolutely vital" in costuming "Mourning Becomes Electra" and/or to the related fields.

Resources

"Mourning..." script
Slides
Film
Snapshots
Drawings
Paintings
Sample fabrics

Evaluation

1. Give students a picture of a particular period and have them list two fabrics and two colors of the period.
2. Have students list four technical tasks to costume a play.
3. Have students prepare a paragraph using proper grammar describing the supplies essential to costuming.
4. Give students two occupations tasks and have them describe the interdependent relationship.
5. Have students list five occupations which are non-theatrical in which costuming skills are used.
6. Give the student a costuming task and have them identify a hobby which relates.

American Literature - Grade 11
"Theatrical Musical Careers"
Arthur Kirson

CURRICULUM CONCEPT:

To understand how representative works by four Victorian composers might be used to create the mood in specific scenes from "Mourning Becomes Electra."*

RELATED CAREER EDUCATION CONCEPT:

To list theatrical musical careers which can enhance a play, film, television, etc.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will list some of the different careers essential to music in the theatre.
Skill Competancy	2. The student will compare standards and techniques for selecting music and/or writing music for plays, etc.
Skill Competancy	3. The student will trace a piece of music from its conception to its use in a theatrical setting, naming specific corresponding careers.
Career Awareness	4. The student will list theatrical musical careers not involved in writing or performance.

ACTIVITIES:

Introduction
Explain how music effects our moods, influence how we act, etc. Indicate how we can use music to accent other works of art.

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*The curriculum concept on which this lesson is based is found in Mourning Becomes Electra by Eugene O'Neil.

"Theatrical Musical Careers"

Tasks

1. Play recordings and/or tapes (or a piano version) of recognizable themes from several popular television shows. (Example: "Batman," "Rawhide," "I Love Lucy", "The Edge of Night".)
   Questions:
   A. Who can identify the music played?
   B. If you didn't know all of the pieces, how might you still have known something about the shows they represent?
   C. What does this tell us about music in the theatrical arts?
2. Identify Wagner, Brahms, Liszt, and Chopin, and play excerpts from one piece by each, including Brahms' "Lullaby", and Chopin's "Funeral March".
   Question: What moods were created by these pieces?
3. Summarize and read four excerpts from "Mourning Becomes Electra", specifically, the scene between Christine and Orin following the young soldier's return, the death scene argument between Christine and the General Lavinia's scene at her father's coffin, and one of Orin's solo mad scenes.
   A. Question: Which music would you attach to which scene?

	Christine and Orin	Brahms' Lullaby
	Christine and General	Wagner
Desired sample answer:		
	Lavinia at coffin	Chopin's Funeral March
	Orin's mad scene	Liszt virtuoso

   B. Question: What is the first theatrical musical career which comes to mind?
   Answer: Composing
4. Have the students compile a chronology, tracing a piece of music from birth to show, noting involved careers.
   Sample list:
   A. Composer
   B. Arranger
   C. Orchestration
   D. Publisher
   E. Conductor
   F. Players
   Question: What other jobs will be necessary if the music is to sound good?
   Sample answers:
   A. Accoustical engineer
   B. Audio technician
   C. Recording engineers

Summary

Stress the theatrical musical careers they discovered that would be helpful to the mood of a play, film, etc.

"Theatrical Musical Careers"

RESOURCES:

Records & record player
Tapes & tape recorder
Piano
Sheet music
"Mourning Becomes Electra" script.

EVALUATION:

1. Have the student list from memory at least five different careers essential to music in the theater.
2. Have the student describe two standards or techniques which could be utilized in selecting music for plays.
3. Have the student describe in detail the responsibilities, skills, etc. associated with careers he listed in #1 above.
4. Have the student describe the training necessary and the responsibility associated with one theatrical musical career which is not involved in writing or performing.

American Literature - Grade 11
"Roles of Woman in A Raisin in the Sun"
Arthur Kirson

CURRICULUM CONCEPT:

To see how Mama in "A Raisin in the Sun" strives to keep her family together.*

RELATED CAREER EDUCATION CONCEPT:

To list the various roles of "women" clarified in "A Raisin in the Sun."

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	1. The student will define their concepts of "woman's role."

ACTIVITIES:

Introduction

Begin the discussion of "Raisin in the Sun" with an examination of the role portrayed by Mama.

Each student is asked to write a brief character sketch of a woman who strongly influences his life. This sketch should include references to tasks done and personality traits. Explain this sketch and compare it to the women in "Raisin in the Sun."

Tasks

1. Ask the students how Mama and Ruth Younger reflect similarities to the women influences in their lives.
2. The students will compare the careers of the Younger women, laundry and house cleaning, with the character sketch they wrote.
3. The students will cite points from the play which indicate how the women's tasks have contributed to their position as matriarchs.
4. Each student will be asked to identify one of Beneatha's speeches which he feels verbalizes her concepts of "woman's role." Several of these will be read aloud.
5. The students will specify ways in which Beneatha's life-concept differs from those of the other women in the household.
6. Ask the students with which theory do they identify or agree, and why. Continue the discussion to the different types of career and life objectives open if you subscribe to Beneatha's theory.

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* The curriculum concept on which this lesson is based is A Raisin in the Sun by Lorraine Hansberry.

7. The student will be asked to do several brief improvisations in which they become the different characters in the Younger household, concentrating on the influence of the various women.
8. Ask to what extent are Mama's sacrifices worthwhile. If the student have not mentioned how the author as a woman has influenced the characters, ask the following questions: Of what significance is it that a woman wrote the play? Why do you think she wrote it?

Summary

Divide the class into small groups. Instruct each group to list the women's toles they feel are most important to the individual woman themselves, to their families, and to society. Each group should share its list with the entire class.

RESOURCES:

"Raisin in the Sun" script.

EVALUATION:

List the women's roles played by women you feel are important to the individual, her family, and society.

American Literature - Senior High
"Comparison of Differing Periods of Time and Personality Adjustment"
Arthur Kirson

CURRICULUM CONCEPT:

To study Rip Van Winkle's problems after waking from his nap.*

RELATED CAREER EDUCATION CONCEPT:

To see how a person of one period can be out of place in another.

THEMES AND OBJECTIVES

Themes	Objectives
Career Awareness	Given the story of "Rip Van Winkle," the student will list the many changes that relate to careers which may occur in a long period of time.

ACTIVITIES:

Introduction

Teacher relates or plays recording of Benjamin Franklin's story about the fly who fell into a cask of Madeira wine and lived to tell the tale. (Available on record: Robert Preston in "Ben Franklin in Paris"--Capital Records.)
Question: How many of you would like to go to sleep and not wake up for twenty or thirty or forty years?

Tasks

1. Have the students read brief excerpts from the text of the story and list crucial plot points emphasizing the changes which Rip encounters.
   Example:
   - A. His wife doesn't know him.
   - B. His children don't know him.
   - C. The country is on the verge of war.
   - D. Landmarks are gone and replaced.
   - E. Jobs have changed.
2. The students will list his own reactions to the following question: How would you react under such circumstances? (For example if your family and friends didn't recognize you.)

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*The curriculum concept on which this lesson is based is Rip Van Winkle by Washington Irving.

"Comparison of Differing Periods of Time and Personality Adjustment"

3. The students will list the changes they have seen on their own blocks in a period of two years.
4. The students will role play, reacting to the changes as their parents did.
5. The students will list some of the changes in politics, jobs, fashion, etc. which they have seen in their life times.
6. The students will list the changes that they envision within the next 5 years, 10 years, 20 years.
7. The students will role play, this time playing themselves in twenty years reacting to the changes they have listed.

Summary

1. Have the students make comparisons of the reactions they listed to those of Rip Van Winkle.

Resources

1. Rip Van Winkle text

EVALUATION:

Have the student prepare an essay pertinent to Career Education objectives and to the story.

American Literature - Senior High
"Exploring Present Day Mental Health Careers"
Arthur Kirson

CURRICULUM CONCEPT:

To study the emotional problems of Lavinia and Orin.*

RELATED CAREER EDUCATION CONCEPT:

To discover the present day mental health careers which could have helped Orin and Lavinia?

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will list careers in the area of mental health.
Educational Awareness	2. The student will tell the ways in which these jobs can help other people.
Self Awareness	3. The student will tell how these jobs can help them.

ACTIVITIES:

Introduction

Motivation: In 1875, Mary Todd Lincoln was adjudged insane. She had, in reality, had a nervous breakdown, but in that era an insane asylum was the only means of care.
Aim: To see how modern mental health techniques might have helped Orin and Lavinia.

Tasks

1. Questions for the teacher to ask the student also points for discussion

    A. How would you define "mental health?"

    B. Of the two characters, Orin and Lavinia, which one do you consider more maladjusted? Why?

    C. What obsessions do you discover in each character? Dow do they touch each other?

---

* The curriculum concept on which this lesson is based is Mourning Becomes Electra by O'Neil

"Exploring Present Day Mental Health Careers"

D. What incidents in the play give evidence of your theories?
   How might things have differed had one of the two characters been well balanced?
   How might they have been helped in our modern society?
      Answer: Therapist, psychiatrist, psychologist, social worker, guidance counselor
   How might you, given one of these roles, help Orin? Lavinia?
   How could you help one of your friends or relatives?
   How might someone in one of these fields help you?

Summary
None provided

RESOURCES:

"Mourning Becomes Electra" script

EVALUATION:

1. The student will list seven careers in the area of mental health.

2. The student will relate how each of the above roles provides assistance to those with mental health problems

American Literature - Senior High
"Daydreaming About Exotic Careers"
Arthur Kirson

CURRICULUM CONCEPT:

To see how each of us is Walter Mitty.

RELATED CAREER EDUCATION CONCEPT:

To discuss that we all have dreams of exotic careers.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness and Self Awareness	1. Given the story of Walter Mitty, the student will list his career dreams and the related possible careers.
Self Awareness	2. The student will identify his career interests in related fields.
Self Awareness	3. The student will role play, portraying their career interest.

ACTIVITIES:

Introduction

Motivation: When you were children how many of you ever envisioned yourselves as teachers or firemen? What were your childhood career dreams?
Aim: To see how we can daydream ourselves into a variety of careers.

Tasks

1. The students will list the three daydreams of Walter Mitty, doctor, defendant, pilot, and summarize episode.
Question: How many of you actually would like to be a doctor?

2. The students will list different types of doctors,
Examples:
a) general practitioner
b) gynecologist
c) obstetrician
d) cardiologist

---

* The curriculum concept on which this lesson is based is The Secret Life of Walter Mitty by James Thurber.

3. The students will list the careers found in a courtroom.
Examples:
   a) lawyer
   b) judge
   c) bailiff
   d) stenographer
   e) clerk

4. The students will list careers involved in flying:
Examples
   a) pilot
   b) stewardess
   c) flight director

Question: If any of you, even in a daydream, cannot see yourself in one of these careers, pick one.

Summary

The students will devise a situation which can involve several of these careers and proceed to improvise a Walter Mytty type daydream.

RESOURCES:

"Walter Mitty" text.

EVALUATION:

1. The student will describe Walter M tty's career dreams and relate them to himself based upon his own skills and desires.

American Literature - Grade 11
"The Effect of Physical, Social and Psychological Factors Upon Career Choices"
Arthur Kirson

CURRICULUM CONCEPT:
CURRICULUM CONCEPT:

To discuss the problems which drove Tom into his private world.*

RELATED CAREER EDUCATION CONCEPT:

To discuss how career choices are affected by physical, social, and psychological factors.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	1. The student will list the various careers which Tom negated, and explain why.
Career Awareness	2. The student will state the reasons for Tom's turning to a maritime career.
Career Awareness	3. The student will list different types of maritime careers.
Self Awareness	4. The student will state and explain his own interest in a maritime career.

ACTIVITIES:

Introduction
Have a student read Tom's opening speech from "The Glass Menagerie."

Tasks
1. The students will list and discuss the careers which Tom considered and turned down explaining why with examples from the play and explaining their own interest and/or disinterest.

CAREER	TOM'S REASONS	STUDENT'S THEORIES
Poet	No income	

---

* The curriculum concept is found in the teacher's notes.

"The Effect of Physical, Social and Psychological Factors Upon Career Choices"

CAREER	TOM'S REASONS	STUDENT'S THEORIES
Factory worker	Confining Boring	

2. Have a student read "The Youth" from the poem, "The Seafarer"." The students will discuss the poem, stressing the ways it expresses Tom's desires (and concepts of a sea-life as stated in the play) and their own.
   Question: We use the term "maritime career" very freely. What are some maritime careers? Sample answers: Navy, merchant marine, fishermen, private boat service, etc.
   Question: Which of these careers seems more or less desirable to you? Why?

3. Have a student read "The Old Sailor" from the "The Seafarer."
   Question: What drawbacks are expressed? Sample answers: loneliness, hand work, poor weather and health conditions.
   Question: Which of these does Tom express? (Answer: loneliness.)

4. Have a student read Tom's final speech from the play.
   Question: How many of you will envision a "maritime career" as one of freedom?

Summary

The students will each express (orally or in writing) and defend his own interest in a maritime career.

RESOURCES:

1. "The Glass Menagerie" script
2. "The Seafarer" text

EVALUATION:

Have the students orally or in writing:
1. List two careers Tom turned down and explain why.
2. Why did Tom choose a maritime career?
3. List at least three maritime careers.

American Literature - Grade 11
"The Role of City Planning In a Changing World"
Arthur Kirson

CURRICULUM CONCEPT:

To familiarize ourselves with the locale of "Washington Square."*

RELATED CAREER EDUCATION CONCEPT:

Comparison of various concepts of the city planning in a changing world.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	1. Given a class lesson and a walking tour, the student will list the things which have changed with time and those which have remained the same in the area.
Career Awareness	2. Given the above, the student will list career opportunities related to architectural and city planning changes.
Self Awareness and Attitudes and Appreciations	3. Given the above, the student will detail and explain (and defend) the decisions they would make were they involved in the above mentioned careers.

ACTIVITIES FOR SESSION ONE:

Introduction
Lesson One
Motivation: The teacher will play the song "Christopher Street" from "Wonderful Town". (Bernstein)
Aim: To compare the Greenwich Village of 1870 to that of 1970.

Tasks
1. The students will list the things which they are most aware of in the Village.
   Sample of student answers:
      1. Your Father's Moustache.

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* The curriculum concept on which this lesson is based is Washington Square by Henry James.

2. Eighth Street
3. Orange Julius
4. Old houses
5. New York University
6. Nathan's
7. Waverly Theatre

(A teacher in a non-New York school can achieve this with magazine pictures, etc.)

2. The teacher refers to "Window to the Past" by Hans Holzer and relates the story of Aaron Burr's haunting his house on West 3rd Street, now the Cafe Bizarre.

   Question:
   What things do you suppose have been in the area since Burr's day or at least since the era of "Washington Square?
   Answer: Lots of old brownstones, brick houses, etc.

3. The students will be shown pictures of Washington Square in particular and Greenwich Village in general, circa 1870. (The teacher might point out at this point that the house in which James J. Walker (100th Mayor of N.Y.C.) was born in 1881 is gone, but, that the house to which to which his family moved several years later at 6 St. Luke's Place is still standing and is still lived in.) The teacher will note that Sixth and Seventh Avenues did not reach south into the Village until after the turn of the century and will recommend numerous books which depict "Old New York," among them:

   "The Big Family" by Vina Delmar,
   "Beau James" by Gene Fowler
   "Age of Innocence" by Edith Wharton

4. The teacher will elicit from the students the changes wrought by the building of apartment houses, large stores, subways, etc.

Summary
The students will compile lists of the things from the past and present which they most expect to see.

ACTIVITIES FOR SESSION TWO:

Introduction
None provided

Task
Lesson Two
1. The teacher will join the students on a walking tour of the Village. (If the teacher does not know any old world spots or stories of the

area, he would be wise to invite a student, teacher, friend, etc. who does.)

The tour should highlight Washington Square and the old houses which still exist along one fourth of its perimeter.

The tour should also include:

1. James J. Walker's house
   6 St. Luke's Place
2. The Mark Twain house on 10th
   near Fifth Avenue
3. The plaques commemorating Bret Harte
   along Fifth Avenue
4. The Rubin Dormitory on Fifth Avenue
   and 11th (with a plaque noting its past.)
5. Washington Mews
6. Minetta Lane
7. Provincetown Playhouse
8. Cherry Lane Theatre
9. Cafe Bizarre
10. Washington Square Park and Arch
11. Waverly Place
12. The antique shops along Christopher Street,
    Hudson Street, etc.
13. The lobby of the Fifth Avenue Hotel.
    (If funds are available, a light lunch at O'Henry's would be vastly enriching. Note, too, the value of browsing through some of the old book stalls along 4th Avenue, and, once there, a look at Cooper Union, the site of Lincoln's address.)

Summary

The students will discuss the changes they have noted, then list them at home.

Lesson Three

1. The students will list the things they have seen, dividing the groups into old and new.

Question:

How have some of the older houses, the brownstones for example, been made functionable and livable?

2. The students will list the careers necessary for the time adjustment, e.g.:
   1. Architect
   2. Contractor
   3. Electrician
   4. Plumber

3. The students will expand the list to encompass those careers necessary for new streets, structures, etc., among them:
    1. City planning
    2. Maintenance
    3. Transportation
    4. Textiles

4. Given the Alcoholics Anonymous prayer, "Grant me the serenity to accept those things I cannot change, courage to change the things I can, and the wisdom to know the difference - "

    Question:
    If you were involved in contracting, or in a related field, how would you decide:

    Summary
    1. Which buildings to renovate?
    2. Which to destroy?
    3. Which streets to widen?
    4. Which streets to discontinue?
    5. Where to use additional public transportation?

    Question:
    How might you do them without destroying the historic flavor of an area?

RESOURCES:

Photos
Slides
Books
Paintings

EVALUATION:

Test material, both oral and written, pertinent to the tasks listed for all three sessions.

DRAMA/SPEECH

Lesson/Unit Title	Author(s)	No. of Lessons
Oral Communication - A Job Asset	Fran Briskman	1
Interview-Proper Voice & Diction	Arthur Kirson	1
Set Designing Careers	Arthur Kirson	2
Theatrical Careers and Associated Life Styles	Arthur Kirson	1
Factors That Influence Career Choices	Fran Briskman	1
Acquiring Appreciation for Various Careers	Fran Briskman	1

Speech - Grade 10
"Oral Communication - A Job Asset"
Fram Briskman

CURRICULUM CONCEPT:

To indicate the necessity for speech improvement*

RELATED CAREER EDUCATION CONCEPT:

To illustrate how effective oral communication is a necessity and an asset on the job.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness and Economic Awareness	1. The student will list reasons why his own speech improvement will aid his future vocational goals.
Educational Awareness	2. The student will be able to construct a situation in which effective oral communication is a necessity.
Educational Awareness	3. The student will be able to construct a situation where ineffective oral communication would create a serious, dangerous or humorous situation on the job.

ACTIVITIES:

Introduction
Teacher will lead a discussion to bring out the following points:
1. Speech: To indicate the necessity for speech improvement.
2. Career Education: To illustrate how effective oral communication is a necessity and an asset on the job.

Tasks
1. Since speech reflects part of our image, I want you (the students) to think of a time when someone spoke to you and affected you positively, negatively, or humorously. Tell us the situation.
   *Note: Televise on tape the following improvisations for future student self-evaluation.

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*The curriculum concept is found in the teacher's notes.

2. Now on a piece of paper write an on-the-job situation where effective communication with another person or a group was a necessity or create an on-the-job situation in which poor oral communication creates serious, dangerous, or humorous problems.
   Sample: Switchboard operator speaks too slowly and inaudibly. Suddenly the switchboard lights up and major confusion takes place.
3. Have the students switch papers. After switching papers students should be called upon to enact the situation that is written on their piece of paper. The student called upon may select other students to help create the improvisation.
4. A discussion after each improvisation should touch upon the following questions:
   a) In what way was the communication effective or ineffective?
   b) What consequences did ineffective communication have upon the situation?
   c) How were the participants affected when communication broke down?

Summary

Teacher will lead a discussion in which each student will be able to respond to the following question: How could your own speech improvement aid your future vocational goals?

RESOURCES:

Video-tape equipment
Tape recorder

EVALUATION:

The student will be given various job situations. For each situation he must indicate three reasons why effective communication is crucial and three problems that may arise as a result of ineffective communication.

Speech/Drama - Senior High
"Interview - Proper Voice and Diction"
Arthur Kirson

CURRICULUM CONCEPT:

To understand the value of proper voice and diction skills.*

RELATED CAREER EDUCATION CONCEPT:

To discover and list the ways in which a course in "Voice and Diction" can help you to find a job in any field.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	1. Given a sample interview, the student will list poor voice and diction traits.
Employability Skills	2. The student will demonstrate proper voice and diction skills in an interview situation.
Skill Competency	3. The student will identify some of his own errors in voice and diction problems.

ACTIVITIES:

Introduction

1. Introduce the aim of the lesson using proper voice and diction in an interview. Indicate the value of studying this particular skill.
2. Have students role play a job interview situation. Acquaint the students with the situation, where it is to be performed and establish the characters.. Allow one student or a visiting teacher to be a potential employer. Allow another student to be an applicant who:
   a) speaks poorly
   b) chews gum
   c) slouches, etc.
   Allow"employer" to ask prescribed questions (either teacher offered or prepared in advance by students. Examples:
   a) Where have you worked before?
   b) Was your previous job involved in this field?
   c) What (additional) background have you in the field?

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*The curriculum concept is found in the teacher's notes.

"Interview - Proper Voice and Diction"

Help participants become involved by setting time of day, talking about facial expressions of the characters and feelings involved.

Prepare observing students by discussing the major concepts of the situation. Help the students to understand why laughing spoils role playing. Allow the interview about five minutes only.

Tasks

1. After the interview role playing situation, ask students to identify those areas where the students did poorly.
2. Now re-enact the interview either with the same participants or new ones. Have students respond after the re-enactment to the following questions:
   a) How was this interview better than the other?
   b) Why?
   c) How might you have better improved it?
   d) Why?

Summary

1. If time permits have students pair off and each practice proper voice and diction skills in an interview situation.
2. Have students summarize the proper voice and diction skills one should use when he interviews for a job.
3. Have each student write on a piece of paper (to be handed in) the one most crucial error which he feels he must correct to better succeed at a job interview.

EVALUATION:

1. Tape an interview situation in which several errors in voice and diction are made. Then have students listen to this tape and list on a piece of paper the errors.
2. During the summary activity 2, using an observer form of criteria, sample how well each student is demonstrating proper voice and diction skills.
3. Compare the student's assessment of one of his own crucial errors with that of teacher judgment for discrepancy.

Speech/Drama - Grade 11
"Set Designing Careers"
Arthur Kirson

CURRICULUM CONCEPT:

To learn how to design a set for a given play.*

RELATED CAREER EDUCATION CONCEPT:

To discover that set design opens many artistic career opportunities.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. Given a scene from a play, the student will identify careers involved with theatrical set construction.
Skill Competency	2. Given a scene from a play, the student will construct scale set dioramas, draw sets, and supply sample props, dependent upon their own talents and interests.
Attitudes and Appreciations	3. Having fulfilled objective #2, the student will tell their reasons for their particular designs and choices relevant to the play.

ACTIVITIES FOR SESSION ONE:

Introduction
The student will read and summarize an assigned scene from whatever play is being studied.

Tasks
1. The student will take a brief quiz testing their knowledge of:
   a) plot
   b) characters
   c) setting
   d) time
   e) props
2. The student will grade the tests for immediate evaluation.
3. Each student will designate the area in which he will do his project.
   Examples:
   a) diorama construction
   b) set drawings
   c) prop gathering

---

*The curriculum concept is found in the teacher's notes.

4. The student will list the supplies which they will need for their individual tasks. (Examples: wood, cardboard, oaktag, charcoal, etc.)
5. Activity: The student will identify the people and supplies necessary to turn their ideas into theatrical realities. (Examples: lumber, steel, textiles, contractors, builders, designers, prop men, etc.)

Summary

Assign the students the responsibilities of constructing a scale set diorama, etc. (objective #2) as homework.

ACTIVITIES FOR SESSION TWO:

Introduction

The teacher will provide a good and a bad example of set concept and design for a play which the student has studied. Example: A typical heavy set or a bare stage with gray, black and red curtains might be fine for "Macbeth." A chrome and glass cocktail table would spoil it.

Tasks

1. The student will debate and/or explain the rationale behind the ideas discussed in the introduction.
2. The student will display and explain their own products.
3. The class will offer criticisms and suggestions pertinent to each project.

RESOURCES:

Play scripts
Art supplies

EVALUATION:

1. The student will list five careers associated with theatrical set construction and describe in detail their construction to set construction.
2. The class members will evaluate the displayed projects.

Speech/Drama - Senior High
"Theatrical Careers and Associated Life Styles"
Arthur Kirson

CURRICULUM CONCEPT:

Speech: To examine the life-style necessities pursuant to a theatrical career.
English: To establish that which we know as "The American Dream".*

RELATED CAREER EDUCATION CONCEPT:

To discover some of the different life styles associated with various theatrical careers and relate the findings to their own desires.

THEMES AND OBJECTIVES:

Themes	Objectives
Self Awareness	1. The student will establish criteria for the life-styles they desire.
Career Awareness	2. The student will survey various theatrical careers identifying the training and life-style inherent in each.
Self Awareness	3. The student will reevaluate their intent to pursue certain theatrical careers.

ACTIVITIES:

Introduction
Ask students to explain their conception of "The American Dream," stressing the things he most wants in life.(e.g. home, family, car, money). Which of these things do you think of as part of a theatrical career?
Sample answers: fame, fortune, glamour, furs, Elizabeth Taylor

The regular curriculum to which this lesson could be integrated would be The American Dream, Albee and Death of a Salesman, Miller.

Tasks
1. The class will compile a list of theatrical careers.
   a) Actor
   b) Director
   c) Producer
   d) Dancer
   e) Musician
   f) Electrician
   g) Scenic designer

---

*The curriculum concept is found in the teacher's notes.

Question: Which of your desires will be met by which careers?

2. Activity: Play the song, "Life Upon the Wicked Stage" (ain't never what a girl supposes). On the basis of the song and a brief class discussion (or meeting with an actor, etc.), the class will list the hazards of the various fields.

   Sample: Actor and/or Dancer
   a) constant training
   b) constant diet
   c) irregular hours
   d) sporadic work
   e) nervous pressures
3. Activity: Play the song "Applause" or "There's No Business Like Show Business"

   Questions: a) What did the song say to you about the life-style of the actor or theatre person?
   b) How could you alter or compromise your life-style desires to those mentioned?
   c) What would you personally have to give up or change?
   d) How many of you are willing?

Summary

Have the class discuss which of their ideas regarding various theatrical careers were clarified, reinforced or destroyed.

RESOURCES:

Record - "Life Upon the Wicked Stage" - Kern
Record - "Applause"
Record - "There's No Business Like Show Business" - Berlin
Record Player
Excerpts from articles about, biographies and autobiographies of theatrical personnages.
In New York or Los Angeles it might be possible to arrange an appearance by an actor, etc.

EVALUATION:

1. The student will be able to describe the life style they want for their own life.
2. The student will be able to describe five main features of the life styles for five major theatrical careers.
3. The student will determine if the life styles associated with theatrical careers "fit" their own personal desires.

Drama/Speech - Senior High
"Factors That Influence Career Choices"
Fran Briskman

CURRICULUM CONCEPT:

To discuss factors responsible for Willy, Biff and Happy Loman's Career choice in *Death of a Salesman*.*

RELATED CAREER EDUCATION CONCEPT:

The student will identify those factors that influence our choices when selecting a vocation.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations, Skill Competency, Educational Awareness, and Employability Skills	1. The student will list factors responsible for influencing a person's career choice.
Self Awareness	2. The student will identify the most important factor, if any, responsible for a vocational selection.

ACTIVITIES:

Introduction
The teacher will lead a discussion to get across the following points:

Aim: Speech
  To discuss factors responsible for Willy, Biff and Happy's career choice in *Death of a Salesman*.

Aim: Career Education
  To identify those factors that influence our choices when selecting a vocation.

Tasks
1. Improvisation
   A high school student is discussing three possibilities for his future with his parent. The three options are:
   a) Joining his father's union
   b) Attending college or
   c) pursuing a musical career

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*This curriculum concept is based, in part, upon *Death of a Salesman* by Arthur Miller

Based on this improvisation, what factors influenced the student's final choice concerning his future?
Possible answers:
a) Parental pressure
b) Interest (value clarification)
c) Security (money potential)

2. How many of you know what you want to do for a living? (List responses on the board.)
3. Have each student list the factors that contributed to their career choice.
4. Have the student identify which factor, if any, should be the most important when choosing your vocation?
5. Have the students respond to the following:
   In Death of a Salesman what factors contributed to Willy Loman's career choice?
   In your opinion, do you believe he made the wisest choice? (Students should cite references from the play)
   From your knowledge of the man, with what vocation might he have been happier? (Repeat questions using Biff and Happy Loman as the subject.)

Summary

Based upon the experiences of the three characters previously discussed, how might the wrong career choice affect your life?

RESOURCES:

Text - Death of a Salesman

EVALUATION:

1. The student will list basic social, educational and value factors to be considered when selecting a possible vocation.
2. The student will identify, using the above factors, the adherence to or disregard for the factors by Willy, Biff and Happy Loman in their career choices.
3. The student will explain the consequence of the characters' choices.

Drama/Speech - Grades 10-12
"Acquiring Appreciation For Various Careers"
Fran Briskman

CURRICULUM CONCEPT:

The actor must know his character thoroughly before he can characterize him properly.*

RELATED CAREER EDUCATION CONCEPT:

The dignity of a job can only be appreciated by knowing the many faceted factors involved in the job.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency and Employability Skills	The student will interview people in varying vocations using a standard questionnaire. This will be done as an independent project for the purpose of understanding the true nature of the job.
Attitudes and Appreciations	After the student has acted out a brief on-the-job scene based on the vocation he has researched, the class will evaluate the effectiveness of the characterization and any possible prejudices attached to the vocation.

ACTIVITIES:

Introduction
Prior to this lesson in the acting class, the students will have studied "characterization" which is the art of portraying a character accurately. The delineation of character involves a methodical questioning on the part of the actor. He must ask certain factual and value questions concerning the character's life. For example, what is the character's age, health, mood, and philosophy of life? How does the character see others, how do others see him, and how does he see himself?

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*The curriculum concept is found in the teacher's notes.

"Acquiring Appreciation For Various Careers"

Prior assignment: Each student will interview a working person from a particular vocation which either the teacher has chosen or the student has chosen. If possible, the interview will be taped. The student must obtain the following information:

Age:
Health:
Mood:
Voice and diction qualities
Length of working day and week
Length of vacation
Salary
Years on the job
Education prerequisites
Job benefits
Job responsibility:
  a) Do you work alone?
  b) Do you work for others?
  c) Do you supervise others?
Satisfaction on the job:

Tasks

Introduction: Explanation of the class procedure for the next two days (three?).

1. The student will supply the class with the information he received from his interview.
2. The class will try to guess the occupation based on the information supplied. As each student guesses, he should cite reasons from the interview that made him draw his conclusion.
3. The same interviewer will then portray the man or woman interviewed in an on-the-job situation. (In the acting class this would employ improvization techniques.)
4. The class will evaluate the effectiveness of the characterization. During this evaluation period the teacher should call special attention to any possible vocational prejudices on the part of the actor and/or class. This could effectively be accomplished with "why" questions. For example: Why did actors A and B grimace when they saw the plumber?

Summary

The teacher will summarize the activities of the past few days pointing out the key concepts the student should have learned relating to attitudes and appreciations associated with certain careers.

RESOURCES:
Printed questionnaire, stage area.

EVALUATION:
In a simulation setting the student will demonstrate his ability (without benefit of a questionnaire) to interview a person and ascertain not only important facts relating to their jobs responsibility but also the person's life style.

READING

Lesson/Unit Title	Author	No. of Lessons
Reading and Answering an Ad for a Job	Michael Dunn	4
Developing Reading Skills to Meet Career Expectations	Peggy Novey	9

Reading (Learning Disability) - Grades 9-10
"Reading and Answering an Ad for a Job"
Michael Dunn

CURRICULUM CONCEPT:

To develop the necessary reading skills to obtain employment.*

RELATED CAREER EDUCATION CONCEPT:

To demonstrate the ability to read and answer an ad for a job.
(Note: This series of four lessons should be taught in conjunction with several related activities in other disciplines:

1. Social Studies - job history, market, relationship of job to society and city
2. Art - type, space, lay out, lettering, balance, blocking, style in clothes
3. Math - wages, decimals, statistics through graphs, computation of advertising costs.

THEMES AND OBJECTIVES:

Themes	Objectives
Employability Skills	Students will identify steps in job seeking.
Skill Competency	Students will list abbreviations and special terms used in ads.
Employability Skills	Students will describe the importance of appearance and personality in job seeking.
Employability Skills Educational Awareness	Students will demonstrate, in reality or simulation, the ability to seek a job.

ACTIVITIES FOR SESSION ONE:

Introduction
Discuss intent of this lesson--How to Read an Ad. Copy ad on board or show it with projector. Elicit problems class faces: where, what paper, what page and section, indexing of jobs, terminology, abbreviations.

Tasks
1. Compare New York City papers (News, Times, Post) for ad sections, survey index system of jobs.

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* The curriculum concept is found in teacher's notes.

2. List typical abbreviations used: asst., exec., secy., adm., mdtn., PM, corp., f/p, expd., 40 wpm, HSG's, comm., wk., no canv.; Some sls bkgd hlpfl but not 100% nec.
3. List typical special terms: no fee, fee paid, temporary, $10,000+, $150-175, pay fri., job shop, equal opportunity employer, agency, Gal Friday, (201) 477-6432.
4. What factors (variable) can't be determined from newspaper? Wages, place, working conditions, etc. (+ some that won't be known till job actually starts).

Summary

Discuss what do we have to know in order to read an ad accurately. Provide transition to tomorrow's lesson--How can we find out more about the job? (phone, write, interview personally)

ACTIVITIES FOR SESSION TWO:

Introduction

How to conduct a telephone interview will be the purpose of this lesson. Present statistics on number of phones in U.S. and what this shows about U.S. Define "communicative skills" - content & presentation, and relate to telephone interview.

Tasks

1. Choose ad, put on board, review terms and abbreviations.
2. Choose two students for employer and employee roles. Conduct interview and have class evaluate.
3. On the basis of criticisms, have two other students attempt to improve techniques in another interview. These interviews could be recorded. Items for discussion: information (what, when, where); parts of interview (opening, body, closing); qualities (courtesy, slang, audibility, clarity, rate).

Summary

Have students list the elements of a successful telephone conversation. Provide transition to session three by discussing how a personal conversation might be different.

ACTIVITIES FOR SESSION THREE:

Introduction

Discuss with students how the interview yesterday could have been conducted from the bathtub. What else must we consider in a face-to-face interview?

Tasks

1. Have class extrovert stand in front; class check him off for posture, style, cleanliness, neatness, expression (see if girls can walk with books on their heads).
2. Another factor not accounted for here is that of nervousness. How can we counteract nervousness? I.e., know you look good, know you're prepared.
3. Review preparation for interview: team prepares one person for each side of mock interview situation, given items to be included in interview.

4. Team of judges for various points of interview (disregard clothes, but "employer" can mention them).

Summary

Summarize: What did we have to consider in a face-to-face interview? Also provide transition to next session: What kind of communication would involve the least personal contact? (written)

ACTIVITIES FOR SESSION FOUR:

Introduction

Show picture of homeless Vietnamese child. Elicit "one picture worth a thousand words." (Only words necessary in this case are name and address of agency to which to send money.) Discuss intent of this lesson: How to write an answer to an ad.

Tasks

1. Supposing reliance on words, fit words to this picture.
2. Can't use picture for job interview, sometimes personal appearance not possible or desirable: reliance on words to sell self.
3. Read "Old Ironsides" - words can be effective, convincing. In ad answering, must convince employer of qualifications and sincerity.
4. Answer to ad on board. Review: a. terms and abbreviations, b. content of letter (reference, qualifications, desire for information and interview), c. form of business letter.
5. Plan written letter.

Summary

Review all four sessions and also discuss why writing an answer to an ad more difficult than talking or phoning.

RESOURCES:

1. Portable tape recorder;
2. newspaper;
3. overhead projector; and
4. telephone instruments (2).

EVALUATION:

Put students in a simulated situation which has them identify steps in job seeking, read abbreviations in ads, actually apply for a position in the ad.

Developmental Reading - High School
"Developing Reading Skills To Meet Career Expectations"

Peggy Novey

CURRICULUM CONCEPT:

Improving reading skills*

RELATED CAREER EDUCATION CONCEPT:

Self-realization: To understand the student's own strengths and weaknesses. He can then use this knowledge to assess his reading ability in relationship to the demands of his career interest.

THEMES AND OBJECTIVES:

Themes	Objectives
Self Awareness and Educational Awareness	1. The student will reveal his career interests and state his perception of the reading level required for success in this occupational area.
Self Awareness and Career Awareness	2. The student will be able to state with greater clarity interest areas in order to relate them to possible career choices.
Educational Awareness	3. Given his specific reading score the student will ascertain the actual reading level required by his career interest area and then determine ways in which he can achieve the required level.

ACTIVITIES FOR SESSION ONE:

Material For the Teacher

If a student is to realistically approach his learning problems he must first learn something about himself. The reading teacher can be the key to the first step in this process. The teacher can help the student discover his strengths and weaknesses in the skills area, then we can help the student realistically attack the problems that may hinder his attempt to obtain his ultimate career objective.

When the student is faced with a realistic assessment of his reading strengths and weaknesses he, and the reading teacher, can plan a program of remediation best suited to his career needs. If the student is reading below the level his career interest demands, he can set a more realistic reading goal. Or, if a student is reading at a higher level than needed he could, perhaps, redirect his career choice.

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* The curriculum concept is found in the teacher's notes

The California Diagnostic Reading test is divided into subject areas. (E.g. social studies, reasoning, vocabulary, etc). This sort of test will give the student more specific information about his reading skills. Any test of this type could be used if the California is not available. It should be a test however, that is not too far above the capabilities of the majority of students being tested.

Included in the unit are supplementary lessons to be used, for diagnostic purposes with those students who show signs of being dysteric. These lessons are to be introduced as necessary to a more complete student profile.

Introduction

We are going to discuss some of the reasons why we need to know our reading strengths and weaknesses and how this knowledge will help us in making career choices.

You are not here because you can't read at all, but because you want to read better. The career you finally choose may depend on the specific reading skills you have. It will be our goal to help you set the kind of reading goals that will enable you to choose the kind of career you want.

Tasks

Suggested orientation topics for Discussion. Discuss the necessity for specific reading skills in various occupational areas (e.g. lab. technician, truck driver, beautician, nurse, etc.).

What are the specific reading needs related to the career interests of each student?

What dangers would be presented in certain occupations if the workers were unable to read? (e.g. lab. technician).

What level of reading ability do you think your area of career interest needs? Write it down on a piece of paper, along with your name and career interest, and hand it in to the teacher.

Administer the diagnostic reading test.

Summary

The class should now see some connection between reading skills and career interest. They are also introduced to the idea that they can set their own goals taking into consideration their skills as well as the skills needed by specific career areas.

ACTIVITIES FOR SESSION TWO:

Introduction

We have now completed part one and two of the diagnostic test. Today we will grade the answer sheets. Each student will grade his own answer sheet. Please realize that this is a diagnostic test and cheating would defeat the purpose of the test. You would not lie to a doctor about your symptoms if he was trying to treat you for an illness.

Tasks

1: Please put a check mark next to each correct answer. You will now add all the checkmarks together. This is your "raw score."

2: With my help you will turn the raw score into a grade score. The grade score tells you at what year and month you are reading presently.

3: Now, with my help, you will list each question answered according to its subject area. You will then total the number correct for each separate area. If you answered 13 out of 15 correctly in social studies this is an area of strength. If, on the other hand, you answered 2 out of 10 correctly in the area of inferences, you need help in this specific area.

4: Each student will draw up a chart according to subject areas, showing his strengths and weaknesses as pointed out in the test results.

Summary

You now know what your strengths and weaknesses are in the area of specific reading skills. You have also found out the grade level you are reading on presently.

ACTIVITIES FOR SESSION THREE:

Introduction

I will now return to you the papers you handed in before you took the diagnostic reading inventory. In these papers you identified what you thought was the required reading level for your career interest. Today we will see how accurate you were.

Tasks

1: A. Compare the estimated score on your paper with the score you obtained on the test.
   B. Each student will then look up the reading scores required by their interest areas stated on the reference paper. The Dictionary of Occupational Titles will supply the information needed.
   C. The student will then compare all the scores.

2: Discussion
   A. What has the student discovered about his area of career interest in relation to reading skills?

B. What has he learned about setting up career goals?
C. If a student wants to be a secretary but scored low in speed and vocabulary, how can that student improve his skills to meet the needs of his career interest?
Continue this discussion with other occupations)
Possible ways to improve reading:
  a. spend more time reading
  b. memorize and practice frequently encountered vocabulary
  c. take a special course
  d. take timed speed reading tests until reach goal

(Note: The teacher must be careful not to let the student feel the situation is hopeless. She should aid the student in setting up a series of "realistic" goals keeping the higher goal in mind.)

D. If a student were employed in a delivery position, what problems might he come up against if he had a 12.9 reading grade?

Summary

It should become clear to you that reading skills and career goals go hand in hand. The more you know about your own strengths and weaknesses in reading and more relationship to the needs of your career interests, the better able you will be to set realistic learning goals. The aim here is to help you discover your needs and then help you plan a course of study designed to meet those needs.

ACTIVITIES FOR SESSION FOUR:

Introduction

You now have entered on your personal profile chart some basic information regarding your strengths and weaknesses in the reading skills. You have also indicated your areas of career interest. Today we are going to try a more unusual way to learn something about ourselves. We are going to try "role-playing." What does the term "role-playing" mean?

Tasks

1. I would like two volunteers to begin with. One student will play the part of a guidance counselor, the other a student looking for help in filling out an application which requests information regarding career preferences. The student has never thought seriously about a career. The guidance counselor, on the other hand, is asking for facts about the student's career preferences. (You could play this through with more than one set of students. During the discussion session the teacher should get from the class recognition of the concept that clarity of interest is needed before a realistic career choice can be made.)
2. a. Discussion of the action as it occurred, and discussion of what was revealed about the student and counselor attitudes.
   b. What kinds of information should students take into consideration when deciding about commitment to a career?

c. When is a person ready to choose a career? (Teacher should also stress that occupations can change as people's needs change.)

Summary
You have seen what happens to many people when they come face to face with deciding about career choices. Perhaps some of you may now be thinking more carefully in terms of what you may want to do after schooling is over.

ACTIVITIES FOR SESSION FIVE:

Introduction
Yesterday we discovered, through a role-playing situation, that an inventory, or list of interests, can be very useful. Today you are going to take an "interest inventory." (Discuss meaning of inventory if necessary.) This will give you even more information about your areas of interest. You will add these results to your profile chart. Again, let me remind you that there are no right or wrong answers on such an inventory. The results are to be used merely to clarify for you, what your areas of interest are:

Tasks
1. Please fill out the self-scoring answer sheet.
2. You are now going to answer the questions. The test is 30 minutes in length.

Summary
You have now completed the Kuder Interest Inventory.

ACTIVITIES FOR SESSION SIX:

Introduction
Today you are going to score your Kuder Interest Inventory. You have already had experience in scoring an inventory and now you can put that experience to use.

Tasks
1. Actual scoring of the inventory with close supervision by the instructor.

2. The student will divide the answers according to the interest categories.

3. He will, then, enter all this new information on his profile chart.

Summary
Your profile chart is now almost complete. It gives you a picture of your reading strengths and weaknesses, the skills requirement of your stated career interest and, a picture of what your major areas of interest seem to be.

ACTIVITIES FOR SESSION SEVEN:

Introduction

For the last few weeks you have been gathering information about yourselves. Each one of you now has a completed profile chart. This chart illustrates the areas of interest you scored highest in on the Kuder. It also shows your strengths and weaknesses in reading skills. Now each of you will look at your profile chart and begin to look for possible areas in which to set goals.

Tasks

1. All students who scored high in area A (divided according to interest areas) will form a group, etc.

2. The groups will list all the possible careers associated with their area of interest. (One student will act as a secretary.)

3. Next to each career, all important reading requirements should be listed. (Use the Dictionary of Occupational Titles).

4. Each group will then construct a chart, for class use, stating the interest area, related careers and reading skills necessary to these careers.

5. The groups will then display these charts so they can be used by all in the class who wish to do so.

Summary

You have now compiled a list of occupations related to the career interests tested on the Kuder Inventory. Also included on the charts, are the reading skills necessary to those occupations. These charts will now be a source of information for the entire class.

ACTIVITIES FOR SESSION EIGHT:

Introduction

You now have entered on your profile chart, a great deal of information about yourself. The next step is to try and use this information to set some realistic goals in the area of improving reading skills. These skills should be related to the career areas you finally decide are closest to the ones you may eventually enter into. You do not have to commit yourself to a specific career now but, you should try to develop those skills in reading which will help you to choose the career you may want when the time comes.

Tasks

1. Look at your profile chart. Compare your list of personal interests with the areas of interest you scored highest on in the Kuder.

1. Next look at the career charts to see which occupations are related to your career interests. Now look for those occupations which include both your indicated interest and your inventory results. (If large discrepencies exist between the two, schedule those students with the discrepencies for a further session. See Appendix.
2. Now, using the occupational areas chosen by you as a guide, list the reading skills necessary for success in these areas.
3. Now comes the most important part of this unit on self-awareness in career education. Compare the reading skills necessary for your indicated areas of career interest with your own strengths and weaknesses as recorded on your profile chart.
4. List the skills in reading you need to work on in the order of their importance. Also, using the career chart as a guide, list the level of competency you must achieve.
5. You must now decide which skills you need to work on most. Each of you will have a conference with your teacher to decide on the best way in which to gain the learning goals stated.

Summary
The student, using all the information he has gathered, will try to set reading goals directly related to his career needs as he sees them.

ACTIVITIES FOR SESSION NINE:

Introduction
(The Conference--a teacher-directed lesson).

The student will meet with the teacher, by appointment, to discuss and decide upon an appropriate remediation program for that student. Note: Improvement is the key word here. At no time should the student feel that all is hopeless. No matter how poorly he reads, some attainable goals can be set. Everyone is capable of improvement. If a student proves to be severely retarded small goals should be set in terms of specific skills, e.g. to be able to spot the topic sentence in a paragraph at the end of a cycle, etc.)

During the conference student and teacher should decide on order of priority, which skills must be improved first. If comprehension is poor then locating topic sentence, and specific facts are a crucial first step. Appropriate materials should then be given to the student and a specific goal set. (e.g. at the end of two weeks the student should be able to define "topic sentence" And, in a testing situation he should be able to locate a minimum of 8 out of 10 topic sentences.) When one goal is completed then another should be set.

Tasks
1. Explain to the student the purpose of this conference.

2. The student and the teacher should decide which skills must be attacked first (see introduction). These should be entered on a Program Chart.

3. The student and teacher will set specific goals and along with a specific time limitation.

4. The teacher will supply the student with a means of attaining the goals set (e.g. instruction, materials, referrals, etc.).

Summary

You now have before you a program of skills improvement developed just for you. Its purpose is to help you gain the skills you need in order to successfully attain the career goals you may one day want.

RESOURCES:

California Reading Test-Junior or High School level.

California Diagnostic Reading Test-Teacher's Guide

Dictionary of Occupational Titles

Kuder Interest Inventory - Form E

Kuder Interest Inventory completed answer sheets, Form E.

Teacher's manual.

Large sheets of construction paper or sheets of wrapping paper.

Career chart

Student profile chart

Sheets of oaktag or file folders which can be written upon.

EVALUATION:

1. The student will prepare a written statement listing his career interests and describing the reading level required for each.

2. The student will write one brief paragraph, to be handed in to the teacher, telling what reading problems he feels may stand in his way concerning future career goals. (Note: this will not be graded. It will merely serve as another source of information about the student.

3. Students should state the areas they are interested in, for example, hobbies, talents, etc. And, the student should be able to relate these to a possible occupation.

JOURNALISM

Lesson/Unit Title	Author(s)	No. of Lessons
Career Opportunities in Television News Broadcasting	Arthur Kirson	1
Understanding the Role of a Critic	Arthur Kirson	1
The Role of Feature Writing in Journalism	Arthur Kirson	4

English/Journalism - Grades 10-11

"Career Opportunities in Television News Broadcasting"

Arthur Kirson

CURRICULUM CONCEPT:

To evaluate a video-taped television news broadcast produced by journalism students.*

RELATED CAREER EDUCATION CONCEPT:

To recognize the vast number of career opportunities associated with the televising of a news show.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. Given a video-taped news broadcast, the student will be able to list many of the careers involved.
Skill Competency	2. Given a video-taped news broadcast, the student will list strong and weak points with respect to constructive suggestions.

ACTIVITIES:

Introduction
The teacher turns the class over to the student chairman of the videotape committee. He introduces each committee member who, in turn, states his role and how it was performed. Examples:

News writer (gathers and writes all "news copy")

Feature writer (gathers and writes all "feature copy")

News editor (perfects all news copy for the broadcast)

Feature editor (same as above for feature)

Anchorman (performs the news)

Camera man

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* The curriculum concept is found in the teacher's notes.

"Career Opportunities in Television News Broadcasting"

Director

Stage manager

Tasks

1. The class views the student produced news broadcast. Each member of the class cites their opinions of both the good and the bad points, and offers suggestions for improvement.
2. Each student including the committee, writes a brief critique relating to each of the careers identified with news broadcasting.

Summary

None provided

RESOURCES:

A video tape recorder and tapes

EVALUATION:

1. The student will list twelve careers associated with television news broadcasting and describe the major functions in detail.

2. The student will demonstrate their ability to constructively write a video taped news broadcast.

English/Journalism - Senior High
"Understanding the Role of A Critic"
Arthur Kirson

CURRICULUM CONCEPT:

To learn to write reviews.*

RELATED CAREER EDUCATION CONCEPT:

To understand the job of a "critic."

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	1. Given sample reviews and a product to review, the student will list the responsibilities of the reviewer.
Skill Competency	2. The student will list the points to be covered in a play or movie review.
Skill Competency	3. The student will write a review of an assigned play or movie.

Introduction
It is ideal if the review produced by this lesson be of a film or stage production of a play being studied by the class.

The students are given rexographed copies of Clive Barnes' review of "Lovely Ladies, Kind Gentlemen," (N.Y. Times - Dec. 29, 1970) which is then read aloud.

Tasks
1. Reread the first line, "I have come to bury 'Lovely Ladies, Kind Gentlemen not to praise it."

   The students will discuss Mr. Barnes' "ethics" in beginning the review in this way, and by so doing, list the points which they feel best define the responsibility of the reviewer.

   (Sample answers:
   A. Fairness
   B. Clarity
   C. Honesty
   D. Factualness)

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* The curriculum concept is found in the teacher's notes.

Question:
Barnes has said that it is also his responsibility to entertain.
How many of you agree with this?
Disagree? Why?

2. The students will list the things which they feel a critic must consider in order to write a responsible review.

   Sample answers:
   A. Cast list
   B. Plot
   C. Development
   D. Acting
   E. Direction
   F. Scene design, lighting, etc.
   G. Costumes
   H. Music
   I. Lyrics
   J. Choreography

Summary
The students will write a review on an assigned topic.

RESOURCES:

N. Y. Times article

EVALUATION:

A judgment of the review prepared by the student.

English/Journalism - Grades 10-12
"The Role of Feature Writing in Journalism"
Arthur Kirson

CURRICULUM CONCEPT:

To learn the ins and outs of feature writing.*

RELATED CAREER EDUCATION CONCEPT:

To discover that feature writing is a path to careers other than Journalism.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. Given a group of feature stories, the student will list the responsibilities and techniques of a feature story writer.
Skill Competency	2. The student will demonstrate their ability to conduct an interview.
Skill Competency	3. The student will write a first draft of the feature story based upon the interview.
Skill Competency	4. The student will proofread and edit their stories.
Skill Competency	5. The student will prepare final drafts of his interviews.
Career Awareness	6. The student will list careers which can utilize the feature story techniques.
Skill Competency	7. The student will produce samples of writing using feature story techniques in related fields.

ACTIVITIES FOR SESSION ONE:

Introduction

Pre-class activity:

The students should be requested to bring to class a "feature story" taken from a newspaper.

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* The curriculum concept is found in the teacher's notes.

"The Role of Feature Writing in Journalism"

Motivation:
The teacher will read aloud the opening paragraph of an interview with a famous celebrity, preferably a paragraph which is exciting or interesting and which establishes a setting and a mood as well as the personality of the person.

Aim:
To see how the feature technique lends itself to writing careers in, and, other than, Journalism.

Tasks

1. The students will list and define some of the different types of feature stories. (e.g. interview, human interest.)

2. The students will classify the stories which they have brought to class.

3. The students will list the responsibilities of the feature story (e.g. to entertain, to inform, to arouse public awareness and/or sentiment.)

4. The students will discuss the lead paragraph of a feature story, stressing its responsibility to grab the reader's attention quickly and to direct it toward an objective.

5. The students will explain how the leads in the stories they have brought to class achieve these.

6. The teacher will establish himself as the topic for an interview. He will ask the students to role-play as reporters whom he has never met. The students will write the lead paragraph which could preface their interview.

7. The teacher will review the lead paragraphs with the class, stressing those which compare or contrast him with the setting and, those which establish the mood of the man. (A good one which develops with some teachers is, "He sure doesn't look like an English teacher!")

8. The students will determine which leads would lend themselves to which stories.

9. Homework Activity:
The students will create a list of questions which they would like to ask the teacher, gearing them toward the type of feature story which they will write (mandated by their own lead paragraphs.)

Summary

Briefly review the major concepts of the lesson.

ACTIVITIES FOR SESSION TWO:

"The Role of Feature Writing in Journalism"

Introduction

Motivation:

Let's have a press conference!

Aim:

To get the facts needed in order to write the feature story.

Tasks

1. The student will break into groups (interview, human interest, etc.) in which they will eliminate repeated questions. (5 minutes)

2. The student and the teacher will establish criteria of good questions. (e.g. multi-faceted, clear to a directed point, not loaded, etc.) This should take 5 minutes.

3. The student will proofread their questions, editing them to meet criteria. (5 to 10 minutes)

4. (20 to 25 minutes) The "reporters" and the "subject" meet for the actual press conference. This will be formal or informal, depending completely upon the personality of the subject.

5. Homework Activity. The students will write the feature story. (approximately 250 words)

Summary

Review each of press conferences reviewing the good points and where corrective action is needed.

ACTIVITIES FOR SESSIONS THREE, FOUR AND FIVE:

Introduction

Activity:

The students will be supplied (or supply) red pencils, scrap paper, staplers, tape, etc.

Tasks

(half period)
1. Students will volunteer to read their stories to the class. For the first several, the teacher will supply corrections (most specifically of form and grammar) and critiques. After the first few, the class members will also offer suggestions.
(half period)
2. The students will edit their own work. The teacher should be available for individual assistance and supervision.
3. Homework Activity:
(following fifth session)
The students will write their revised final drafts to be submitted for grading.

"The Role of Feature Writing in Journalism"

NOTE:

It is not necessary that all students read their original drafts aloud. If, however, many volunteer, additional workshop days can be added within the limits of the individual term calendar and curriculum requirements.

Summary

None provided

ACTIVITIES FOR SESSION SIX:

Introduction

Motivation:

How many of you expect to spend the rest of your lives writing feature stories for a newspaper?

Aim:

To apply the techniques learned about feature writing to other careers.

Tasks

1. The students will restate the techniques learned.
2. The students will list writing careers in which they can use these techniques and explain how.

Sample answer on board and in student notebooks:

CAREER	SUB-CAREER	HOW
A. Fiction writer	Novel Short story Play	Creating characters, situations, dialogue that is well directed.
B. Non-fiction writer	Historical books Political books	
C. Public Relations	Advertising Speech writing Political planning and campaigning	Hitting things directly to a vital point.
D. Teaching	Subject teachers Administrators Curriculum planners	Establishing direction of education

Summary

The students will use their feature stories to produce a brief product pursuant to one of the suggested fields - e.g.:

a) A short story
b) A short play
c) An advertisement for a product
d) A political speech

RESOURCES:

A feature story
Paper
Pencils
Tape
Staplers

EVALUATION:

1. The student will describe in detail the responsibilities of a feature writer and list several techniques he might use in constructing a story.

2. In a simulation situation the student will demonstrate their ability to conduct an interview.

3. The student will originate a feature story that would be suitable for printing in the school newspaper.

MATHEMATICS

Lesson/Unit Title	Author(s)	No. of Lessons
Job Use of the Ruler	Jess Resnick	1
Introduction to Signed Numbers	Jess Resnick	1
The Converse, Inverse, and Contrapositive	Jess Resnick	1
Statistical Tables and Facts	Jess Resnick	1
How to Use Per Cent	Jess Resnick	1
Using Methods of Proof	Jess Resnick	1
The Metric System	Jess Resnick	1
Introduction to Probability	Jess Resnick	2
The Use of the Line Graph	Jess Resnick	1
Using Fractions and Decimal Fractions	Jess Resnick	2
Numbers and Numeral Systems	Jess Resnick	3
The Numbers of Arthimetic	Richard Volo	1
Different Methods of Solution	Richard Volo	1
Uses of Numbers - Measurement	Richard Volo	1
Verbal Phrases and Mathematics	Richard Volo	1
Constructing and Reading Bar Graphs	Richard Volo	1
Dry Mixture Problems	Richard Volo	1
Computing Wages Through Different Mathematical Methods	Richard Volo	3
Mathematics in Relation to Banking	Richard Volo	2
Venn Diagrams in an Occupational Context	Donald Matos	1
Measuring Occupational Interests Using Ratios	Donald Matos	1
Pictograms in an Occupational Context	Donald Matos	1
Probability Theory and Occupations	Donald Matos	1
Dealing with Troublesome Numbers	Donald Matos	1
Budgeting for a Family of Four	Donald Matos	1

Mathematics - Grades 9-10
"Job Use of the Ruler"
Jess Resnick

CURRICULUM CONCEPT:

To understand how to read a ruler.*

RELATED CAREER EDUCATION CONCEPT:

To understand that basic skills in using the ruler are needed in many jobs.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	The student will name six jobs that use the reading of a ruler as a job skill.
Skill Competency	Given a simulated job situation, the student will correctly measure various lengths.
Skill Competency	Given a simulated job situation, the student will correctly construct lines of specified length.

ACTIVITIES:

Introduction
1. Conduct class discussion concerning why we learned how to read a ruler in the previous lesson.
2. Conduct class discussion involving occupations which utilize a knowledge of reading the ruler, e.g., Stage construction, display, costume design, interior decoration.
3. Conduct class discussion gathering ideas for plan to measure dimensions of all desks in classroom and to cut pieces of material meeting such specifications (dimensions) to cover desks.

Tasks

1. Have pupils measure dimensions of their desks (using rulers made in previous lesson by students and knowledge of reading ruler acquired in previous lesson).

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*The curriculum concept is found in the Curriculum Guide, Teaching Mathematics in Junior High School, Board of Education of the City of New York, 1969.

2. Have students construct lines of previously specified lengths (activity 4) as dimensions on felt, and cut out such areas.
3. Have students check their work by placing the cut out material on their desks.
4. Ask class how previous task (activities 1-3) may be applied to world of work; e.g., upholstering, carpet laying.

Summary:

1. Ask class how a ruler may be used in various specified occupations; e.g., interior decorating and design.
2. Have students summarize specifically how ruler, yardstick, tape measure, etc. are used as tools of measure.

EVALUATION

Examination: Part I - Name a specified number of occupations utilizing reading the ruler and explain how this skill is used.
Part II - Measure the dimensions of given figures.
Part III - Construct lines of specified given lengths.

Mathematics - Grades 9-10
"Introduction to Signed Numbers"
Jess Resnick

CURRICULUM CONCEPT:

To understand signed numbers: Enlarging the set of numbers of arithmetic to include the negative numbers.*

RELATED CAREER EDUCATION CONCEPT:

To understand that knowledge concerning signed numbers (what they are and how to use them) is a necessary tool in many occupations.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	The student will list 10 occupational fields that utilize the concept of signed numbers.
Career Awareness	The student will describe the importance and necessity of signed numbers in the world of work by five specific examples.

ACTIVITIES:

Introduction

1. Challenge the students to solve a variety of mathematically related problems yielding a negative number as the solution. For instance:
   a) The temperature at 7:00 a.m. this morning was six degrees. If the temperature drops eight degrees, what will be the resulting temperature?
   b) How may we represent a withdrawal of $20 from the bank?
   c) Subtract 500 feet from 200 feet.

2. Indicate to the students that these examples show that certain math concepts are a necessary tool in occupations on our everyday living.

Tasks

1. Define negative numbers for the students.
2. Show how negative numbers may be represented on a number line.

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*The curriculum concept is found in the Curriculum Guide, Teaching Mathematics in Junior High School, Board of Education of the City of New York, 1969.

3. Discuss with class examples of number lines utilizing signed numbers in various occupational fields; for example, thermometer (temperature), sea level charts (above and below).
4. Discuss the concept of "opposites" with the students. Thus, -7 is the opposite of +7 and so on. Give the class examples and elicit from the students examples of "opposites" in practical settings; for example, if +12 represents a gain of 12 yards, represent a loss of 12 yards in a football game.
5. Show the class the dual interpretation give to "+" and "-" as signs of operation and signs indicating direction.
6. Give the class a series of practice examples utilizing the concepts of signed numbers thus far discussed; for example, A stock opens at $20 a share. It increases in value by $3 after one hour, then drops $7 the second hour, and increases in value by $1 the final hour. Determine the closing value of one share of stock.
7. Discuss and list with the class occupational fields utilizing signed number concepts; for instance, stock market, statistics, surveying.

Summary

1. Have students discuss what signed number are and how they are used.
2. Have students name and describe various fields in which signed numbers may be used.

EVALUATION

Examination: Part I - Locate and identify signed numbers of a number line.
Part II - Examples utilizing concepts of signed numbers as gain and loss (see Task 6)
Part III - List and describe 10 occupational fields utilizing concepts of signed numbers in these fields.

Mathematics - Grades 9-10
"The Converse, Inverse, and Contrapositive"
Jess Resnick

CURRICULUM CONCEPT:

To understand the converse, inverse, and contrapositive of a statement.*

RELATED CAREER EDUCATION CONCEPT:

To be aware that improvement of reasoning is a useful aid in the decision making process.

THEME AND OBJECTIVE:

Theme	Objective
Decision Making	Given 20 sets of statements involving the world of work, the students will correctly identify which conclusions in these sets are valid due to proper reasoning.

ACTIVITIES:

Introduction
1. Using the concepts of hypotheses and conclusion taught in the previous lesson, have students identify these elements (hypothesis and conclusion) in a number of statements listed on the board. In addition, have students identify the statements as true or false. Make provision for converses, inverses, and contrapositives. For example:

   A sculptor is a talented person.
   A talented person is a sculptor.
   If one is not a sculptor, one is not talented.
   If a person is not talented, he is not a sculptor.
2. Indicate to students the relationship of the mathematic concept to the career education concept.

Tasks
1. Using statements from the introduction as examples, define "converse" for the class.
2. Give the students statements for which they must form the converses and decide whether they are true or false. Elicit from the students the fact that the converse is not always true, regardless of the original statement being true or false. For example: Write the converse of--

   (STATEMENT): Vertical angles are equal angles (TRUE)
   (CONVERSE) : Equal angles are vertical angles (NOT NECESSARILY TRUE)

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*The curriculum concept is found in the teacher's notes.

3. Using statements from the introduction, define "inverse" to the class.
4. Have students form the inverse of several given statements and discover that inverses are not necessarily true, even if the original statements are true. For example: What is the inverse of--
   (STATEMENT): An architect needs arithmetic skills (TRUE)
   (STATEMENT): A person who is not an architect, does not need arithmetic skills (NOT NECESSARILY TRUE)
5. Using statements from the introduction, define "contrapositive for the class.
6. Have students form contrapositives of given statements to see that the contrapositive of a true statement is always true.
   e.g. (STATEMENT): A square is a quadrilateral. (TRUE)
   (CONTRAPOSITIVE): If a figure is not a quadrilateral, it is not a square. (TRUE)

Summary

Give the class a rexographed sheet of 20 pairs of statements, some pairs consisting of statements and converses, some statements and inverses, some statements and contrapositives, all relating to career education and the world of work. Have students identify which conclusions are valid and which forms of reasoning are being used in each set. Have the class discuss in detail each pair of statements listed.

e.g. a. An airline stewardess travels a great deal.
If one travels a great deal, she is an airline stewardess.

b. A man must have short hair to work for the Acme Soda Company.
A man not working for the Acme Soda Company, does not have to have short hair.

EVALUATION:

Examination: Part 1: Given a statement, the student will write the converse, inverse, or contrapositive, e.g. Write the contrapositive of: A burglar is a criminal.

Part 2: Given a set of statements the student will identify the type of reasoning used and discuss whether the reasoning is valid or invalid.

Mathematics - Grades 9-10
"Statistical Tables and Facts"
Jess Resnick

CURRICULUM CONCEPT:

To understand how to read and interpret statistical tables - the range, mode, median, and mean. *

RELATED CAREER EDUCATION CONCEPT:

To be aware that statistical tables are important resources in gaining information to be used in the decision making process and in career awareness.

THEME AND OBJECTIVE:

Theme	Objective
Skill Competency and Educational Awareness	Given 5 statistical tables involving various career comparisions or specific career facts, the student will compute the range, mean, mode, and median statistic and explain the relevance of each.

ACTIVITIES:

Introduction

Use the previous day's lesson in which the students learned how to compute the range, mode, median, and mean. Put two tables on the board listing the names and corresponding salaries of 5 workers in occupation A in the first table, and the names and salaries of 5 workers in occupation B. (The teacher should make sure that the range of salaries in career A is large with a high top salary, while the range of salaries for career B is small with a lower top salary than occupation A, but a higher mean, median and mode salary). Discuss with the students which career they would choose, A or B, using salary as the sole criterion.

e.g.

OCCUPATION A		OCCUPATION B	
WORKER	SALARY	WORKER	SALARY
1	$20,000	1	$14,500
2	12,000	2	14,000
3	8,000	3	13,500
4	7,500	4	13,500
5	7,000	5	13,000

Tasks

1. Have students compute the range, mode, median, and mean salary for

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*The curriculum concept is found in the teacher's notes.

each occupation and discuss what each statistic means in the given context.

2. In the light of Task 1, discuss again which career preference they have now.
3. Ask the class how the statistics - range, mode, mean, and median - help in reading a statistical table and exactly what these statistics tell us.
4. Use previous homework assignments in which students were asked to list careers to which they aspire, to list a table on the board showing the jobs named and number of students listing that job.
5. Have students compute the range, mode, median, and mean statistic of job preferences listed.
6. Discuss with class the importance of this table and these statistics:
   a. What do these statistics tell us?
   b. Why is each specific job listed as popular (or unpopular) as it is?

Summary

Perform with the class a similar evaluation of one or more statistical tables referring to the world of work e.g.

1. A table listing professions and number of vacation days for each.
2. A table listing professions and number of years of post-high school education necessary for that career.

RESOURCES:

1. Statistical Abstracts
2. U.S. Bureau of Labor
3. Faculty advisor from the New York Employment Service

EVALUATION:

Give students 5 statistical tables involving various career comparisons or specific career facts (see introduction, task 4, summary) and ask them to compute the range, mode, median, and mean statistic for each table while explaining the relevancy of such statistics.

Mathematics - Grades 9-10
"How We Use Per Cent"
Jess Resnick

CURRICULUM CONCEPT:

To understand per cent - its meanings and applications.

RELATED CAREER EDUCATION CONCEPT:

To be aware that understanding and utilization of the concept of per cent as a computational tool is necessary in becoming a competent consumer.

THEMES AND OBJECTIVES:

Themes	Objectives
Education Awareness	The student will name 10 tasks the consumer performs which involve the use of per cent as a computational tool.
Skill Competency	The student will solve 5 problems involving per cent in a consumer-oriented situation.

ACTIVITIES:

Introduction
1. Pose the following challenge to the class: After eating dinner at his favorite restaurant, Mr. Miller gets a check from the waiter totaling $5.47. If the waiter arrived at this total by charging Mr. Miller $.47 tax on his food bill of $5.00, was Mr. Miller billed correctly? Was he overcharged or undercharged? (Note: Use 7% as the rate of taxation)
2. Discuss the correct solution to the given problem in activity 1. (Note: Use the concept of per cent and finding a per cent of a given number as taught in the previous lesson)

Tasks
1. Discuss with the class through this illustration and others the need that they, as consumers, have for using the concept of per cent. Various consumer tasks should be elicited and discussed with this in mind.
   e.g. a. Sales tax in department stores
   b. Per cent charged on car loans as interest
   c. Discount buying
2. Consider, with the class, one of the consumer tasks named in Task 1. Quickly define and review basic terms and concepts needed for solution of problems in this area (Note: These topics should have been covered

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*The curriculum concept is found in the teacher's notes.

in previous lessons). Analyze and solve with the class a problem involving per cent in this area.
e.g. After defining discount for the class, the following problem may be posed:
A particular Gibson guitar has a list price of $140. If a store advertises this guitar in the paper as being sold at a 15% discount, what will the cost to the consumer be?

3. Task 2 may be repeated as often as time available allows, each time focusing on a different consumer task involving per cent (Note: Some suggested areas might be - interest earned in bank accounts, sales tax, interest charged in installment buying, comparison by per cent).

Summary

1. In light of the activities performed, and any new ideas that might have been gathered, have the class name and list at least 10 tasks the consumer performs which use per cent as a computational tool.
2. Pose a practical consumer problem to the class involving a number of per cent computations.
   e.g. A photography student wished to purchase a dark-room kit. He sees one advertised in his school newspaper at a cost of $70 less a 12% discount. This cost does not include sales tax. If he put $60 in the bank one year ago which has earned 6% interest, does ho now have enough money in the bank to cover the total cost of the dark-room?

EVALUATION:

Examination: Part I: Name 10 tasks using per cent performed by the consumer.
Part II: Solve 5 problems involving per cent in a consumer oriented situation.

Mathematics - Grade 10
"Using Methods of Proof"
Jess Resnick

CURRICULUM CONCEPT:

To understand the various methods of proof.*

RELATED CAREER EDUCATION CONCEPT:

To be aware that understanding the various methods of proof and argument will help students make decisions about themselves and their position in the world of work.

THEME AND OBJECTIVE:

Theme	Objective
Decision Making	Given 10 paragraphs involving career situations, the student will be able to correctly describe the method of proof employed and whether or not the conclusion(s) arrived at is valid.

ACTIVITIES:

Introduction

1. Hand out a rexographed sheet to the class entitled "Four Ways to Choose Your Job". The following information will be provided for the students on this sheet: The Alpha Drum Company and the Beta Drum Company are two opposing drum manufacturing companies located next door to each other. Both are currently seeking people to employ in their drumstick making departments. Here is how four young drumstick makers chose between the two companies -
   a. Ever since John was old enough to carry a drumstick he knew he would work for the Alpha Drumstick Company. After all, every male member of his family worked for Alpha. Therefore, John knew he would end up working for Alpha.
   b. Jane wanted to be happy wherever she worked. One day while standing outside the two drum companies she notices that three workers leaving Beta were all smiling. She concluded that people working at Beta must be very happy there and, thus, decided she would work at Beta.
   c. Jean always wanted to make a lot of money. As a talented drumstick maker she knew she could work for Alpha or Beta; whichever company she chose. Finding out the average weekly salary of drumstick makers at Alpha and the average monthly salary of drumstick makers at Beta, she computed the yearly salary for each. She then decided that Alpha was the company for her.

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*The curriculum concept is found in the teacher's notes.

d. Jim loved to travel. In order to do so he needed as much vacation time as possible. Since all drumstick makers at Alpha were guaranteed 4 weeks vacation in their contract, Jim decided to work at Alpha knowing he would get 4 weeks vacation.

2. Put the following questions on the board for the class to answer (a) What was important (the criterion) to each of the four people in making their decision? (b) In your opinion, did each person make the correct decision using the information they had?

Tasks

1. Discuss the four situations posed with the class in each of their answers to the questions on the board. Ask the class what is important to them in choosing a job or a company to work for, and how they would go about getting information to help them in their decisions and/or conclusions.
2. Define the method of induction for the class. Elicit from the students why situation (a) is an example of an inductive argument and why induction is not a valid method of proof. A quick example may be given here--e.g. Every morning at 6:02 A.M. my rooster crows. Therefore, tomorrow at 6:02 A.M. my rooster will crow.
3. Define the method of measurement for the class. Elicit from the students why situation (c) is an example of arriving at a conlusion using measurement for proof. Discuss why this method is not considered a valid proof.
4. Define the method of observation for the class. Elicit from the students why situation (b) is an example of arriving at a conclusion using observation for proof. Discuss why this method is not considered a valid method of proof.
5. Define the method of deductive reasoning for the class (major premise, minor premise, conclusion). Elicit from the students why situation (d) is an example of the deductive method. Use the syllogism as your illustration:

I. All drumstick makers at Alpha get 4 weeks vacation	(major premise)
II. Jim is a drumstick maker at Alpha	(minor premise)
III. Jim will get 4 weeks vacation	(conclusion)

Show the class why deduction is always a valid method of proof. Give the class some examples of deductive reasoning. e.g. All music students entering the Erasmus Hall Institute of Music and Art are required to take 4 years of performance classes. Therefore, if John applies to this Institute, he should expect to get 4 years of performance.

Summary

Give the class as many examples of the types of reasoning studied in this lesson as time will allow. These examples should pertain to career education decisions. The students should identify which method of proof is being used in each individual case and whether or not they feel the conclusions are valid.

EVALUATION:

Examination : Given 10 paragraphs (see Introduction) involving career situations, the students will be able to correctly identify the method of proof being used and if the conclusion is valid.

Mathematics - Grade 9,10
"The Metric System"
Jess Resnick

CURRICULUM CONCEPT:

To understand the metric system of weights and measures.*

RELATED CAREER EDUCATION CONCEPT:

To have a knowledge of the foundation of our system of weights and measures is necessary for understanding the entire occupational spectrum and the economic trend in the world today.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	The student will name six occupational fields which require a knowledge of and/or computational skills using the metric system.
Skill Competency	The student will accurately convert five measurements from the metric system to the English system and five measurements from the English system to the metric system.
Economic Awareness	The student will explain the trend in the United States from the English system to the metric system.

ACTIVITIES:

Introduction

1. Challenge the class with the following problem: Last summer, Gregory and Richard, two friends, took a trip by car to Mexico. While traveling on a highway near Mexico City, Richard noticed the speed limit posted as 60, and told this to Gregory who was driving at the time. Gregory who didn't want to get into trouble in a foreign country, kept the car at 50 miles per hour. Nevertheless, five minutes later they were given a ticket for speeding. Why?

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*The curriculum concept is found in the Curriculum Guide, Teaching Mathematics in Junior High School, Board of Education of the City of New York, 1969.

"The Metric System"

Tasks

1. Discuss the previous problem with the class. If possible, elicit from the class the fact that the 60 in the problem refers to kilometers, not miles and, therefore, 50 miles per hour may be greater than 60 kilometers per hour. Expand the discussion to include the following facts and points.
   a. There are two widely used systems of weights and measures in the world today: the metric system and the English system. Explain, define, and discuss with the class the differences of the two.
   b. The United States will be switching to the metric system. Discuss the advantages of this system and how such a change will affect the country, in general, and the students,specifically.
2. Define the standard units of weight and length in the metric system: gram, meter.
3. Explain the relationships between units in the metric system as being based on the number ten. Define the various prefixes used, e.g. centi is equal to 1/100 or 0.01 of the basic unit.
4. With this knowledge of prefixes established, relationships between measures should be now shown, e.g., 1000 millimeters = 1 meter.
5. Compare the English system and metric system for their approximate unit equivalents:
   a. 1 meter = 39.4 inches
   b. 2.54 centimeters = 1 inch
   c. 1 kilogram = 2.2 pounds
   Note: presenting much of the aforementioned information in tabular form is suggested.
6. Discuss and compute with the class several examples requiring the conversion from one system to the other, e.g., in the United States, track and field events include the 100 yeard dash. In the Olympic games the 100 meter dash is used. Which is longer?
7. Discuss with the class a number of occupational fields in which a knowledge of the metric system is necessary. Ask the class to name some careers which they feel uses the metric system. Discuss these various fields with the students, e.g., photography: the photographer, cameraman, developer work with 16 millimeter, 35 millimeter, etc.,types of films. What do these measures refer to? Why is the metric system used in photography? Discuss the foreign influence in this field.

Summary

1. Review with the class the relationships between the units in the English system and the metric system. Have the students do examples involving such conversions.
2. Have each student make a list of five specific jobs using the metric system as a necessary job skill, e.g.,
   a. photographer
   b. lab techician
   c. pharmacist
   d. track and field athlete
   e. physicist
   f. chemist

"The Metric System"

RESOURCES:

None

EVALUATION:

The students will be evaluated by taking an examination composed of three parts:

Part I: The student will name six occupational fields which use the metric system.

Part II: The student will perform 10 mathematical conversions from each system to the other.

Part III: The student will describe in an essay the trend toward the metric system in the United States.

Mathematics - Grades 9-11
"Introduction to Probability"
Jess Resnick

CURRICULUM CONCEPT:

To understand the meaning of probability and to use probability theory to solve simple probability exercises. *

RELATED CAREER EDUCATION CONCEPT

To understand how to accurately predict events using available information is a necessity in the decision making process.

THEMES AND OBJECTIVES:

Themes	Objectives
Decision Making Self-awareness	Given 10 decision-making situations, the student will correctly compute the probability of all possible outcomes for each situation, and state the decision they would have arrived at in that situation giving a reason for that decision.

ACTIVITIES FOR SESSION ONE:

Introduction

1. Relate the following story to the class (Note: Use actual names and facts wherever possible): Miss Harris, the conductor of the choral club, had been accused by her students of being prejudiced in picking soloists for the annual Christmas contest. The students contended that Miss Harris always picks a girl. Therefore, in order to be fair this year, she agreed to put the names of the 60 girls and 40 boys who are the members of the choral club into a hat and choose one at random.
2. Discuss the previous story with the class by asking them the following questions:
   a. Is Miss Harris now being fair?
   b. Can we predict the outcome of the drawing?

Tasks

1. Define probability for the class (probability theory).
2. Define outcome for the class: distinguish between "successful" outcomes and "all possible" outcomes.
3. Mathematically define (by formula) the probability of a successful outcome (Note: These definitions in Tasks 1-3 can be illustrated in terms of the given problem).

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*The curriculum concept is found in the teacher's notes.

4. Do a sample probability example for the class, eliciting as many answers as possible. Stress mathematical definitions and computations in this example.

   e.g. A cup contains 3 pennies, 4 nickels, and 5 dimes. One coin is drawn at random. Find the probability that the coin drawn is

   a. A penny
   b. A nickel
   c. A dime
   d. A nickel or a dime
   e. Not a penny
   f. Not a dime
   g. A penny or a dime or a nickel
   h. A quarter

Summary

1. Give the class a series of at least 10 examples involving arriving at decisions mathematically. Have the students compute the probability of each possible outcome within the specific examples and then based on these probabilities make the decision the problem calls for. Have students compare their individual decisions by discussing why they arrived at their decisions (mathematically and otherwise).

   e.g. While waiting for his train to arrive, Kevin finds himself overwhelmingly thirsty. Not seeing his train coming, he walks over to a soft-drink machine which advertises orange, grape, cola, lemon, and cherry sodas. When he gets there, however, he sees that someone has removed the labels from the selection buttons. Kevin likes grape and cherry sodas only. He deposits his quarter, pushes a button, and hopes for the best!

2. The following questions referring to the previous story should be asked and discussed (analogous questions should be asked for the other examples given):

   a. What is the probability Kevin will get a soda he likes?
   b. What is the probability he gets a soda he doesn't like?
   c. Should Kevin have invested his quarter trying to get a soda he likes?
   d. Would you (the class) have tried to get a soda you liked if you were Kevin?
   e. What alternatives did Kevin have?

ACTIVITIES FOR SESSION TWO:

Introduction

This lesson is a guidance infusion for values clarification using the first lesson as a base. (Note: Choosing from probabilities in order to make decisions is an ideal vehicle for values clarification. Therefore, as part of a follow-up lesson the following set of tasks may be employed).

Tasks

1. Give the class an example consisting of two parts. The first part should allow the students to find the probabilities associated with events. The second part will list the results of making the choices

associated with the various probabilities.

e.g. At a company bazaar the following games of chance are set-up--game A and game B. In game A three cards are placed face down--two kings and an ace. The player gets to pick one card. If he picks a king he loses 70 cents. If the ace is selected, $1.40 is won. In game B only two cards are face down--a ten and a jack. If the ten is picked 50 cents will be lost, but if the jack is chosen $1.10 is won. Which game would you pick?

2. Based on the students' selections, a discussion may then take place clarifying values and objectives. The following points (objectives, values) could be discussed:
   a. anting to win the greatest amount of money possible
   b. anting to avoid the greatest loss
   c. anting to be sure to win
   d. anting to be sure not to lose

Summary

Have students by themselves decide how they personally responded to the tasks above. Summarize the two lessons' intent.

EVALUATION:

Examination:

1. Given 10 decision-making situations, compute the probability of all possible outcomes for each event listed. State the decision arrived at justifying that decision.
2. Given a personal decision point, the student will describe their own value system.

Mathematics - Grades 9-10
"The Uses of the Line Graph"
Jess Resnick

CURRICULUM CONCEPT:

To understand the uses and construction of the line graph.

RELATED CAREER EDUCATION CONCEPT:

To be aware of the many uses of the line graph and the occupational fields in which the line graph may be successfully employed.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness and Career Awareness	The student will name 10 occupational fields which may utilize the line graph and describe how this graph could be used.
Skill Competency	Given job oriented information, the student will construct 3 line graphs based on that information.

ACTIVITIES:

Introduction
1. Pose the following problem to the class:
   The Music Department decides to sponsor a concert of a band composed of students from the school. They agree to assign students to sell tickets both in the individual music classes and in the lunchroom.
2. Discuss the previous problem with the class as to the implementation of a design for selling tickets. The following points should be covered:
   a. Number of tickets to be printed.
   b. People to be assigned to sell tickets.
   c. Number of students needed to sell tickets each period.
   Other pertinent points relative to the discussion may also be covered. It should be elicited during this discussion that a varying number of student salesmen will be needed. To determine this number by specific period, the total number of students in music classes and in the lunchroom, by period, must be calculated. Then, depending on the size of the number calculated, a certain number of salesmen may be assigned - the larger the number, the more salesmen needed. For example, if 130 pupils

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*The curriculum concept is found in the teacher's notes.

are in music class or the lunchroom period 3, four salesmen may be needed. On the other hand, if 240 is the total number period 6, seven salesmen may be needed.

3. In light of the previous discussion, the need for organizing the data (number of students in music or lunchroom) period by period, should be discussed. (Note: statistical tables, scales, and the line graph have been taught in recent previous lessons.) Also, the relative size of the number of students to be serviced and the trend of the size of this number (whether it increases or decreases from period to period) would be most helpful in deciding how many salesmen to assign each period. Thus, a new type of graph - the line graph - should be introduced to the class as a good tool to use in this problem.

Tasks

1. Define the line graph for the class. Describe its necessary components-title, horizontal and vertical scales, ordered pairs of points, etc. The definitions, descriptions, etc. should be illustrated in the construction of a line graph based on the opening problem.
2. The advantages and disadvantages of the line graph should, if possible, be elicited from the class. (The ease of spotting a trend from one period to another or over a number of periods, and the relative size of the number of students each period should be noted here).
3. Initiate a discussion with the class as to occupational fields that may utilize line graphs. Have the students illustrate or describe how the graph could be used: e.g.
   a. market research - to show buying trends by month or by sex
   b. stock broker - to show relative value of stock.
4. Show the class how a line graph may be used and interpreted by constructing a line graph with them based on career information, e.g., put a list on the board of the number of jobs available in the city "job market" by month. Have the students make a line graph from the given data and interpret that graph by answering questions of the following type:
   a. Do the number of jobs available increase or decrease during the summer months? Can you account for this?
   b. When would be the best time to seek employment? Why?

Summary

1. Have the class construct a line graph based on given information and answer questions relating to the graph.
2. Have each student make a list of 5 occupational fields in which the line graph may be used. Compare these suggestions.

RESOURCES:

Bureau of Statistics, Labor Department, for the city in which one resides.

EVALUATION:

1. Have students list ten occupational fields which uses the line graph and describe how it is used.
2. Give to the students a problem in a job situation which will have them construct 3 line graphs.

Mathematics - Grades 9-10
"Using Fractions and Decimal Fractions"
Jess Resnick

CURRICULUM CONCEPT:

To understand the applications and uses of fractions and decimal fractions.*

RELATED CAREER EDUCATION CONCEPT:

To be aware that elementary skills involving the use of fractions and decimal fractions is both a requirement and necessary tool for entry into many occupational fields.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. The student will identify 15 jobs which require and use computations involving decimal fractions and fractions.
Skill Competency	2. Given 25 examples taken from a Civil Service Examination, the student will successfully solve such examples using computations with fractions and decimal fractions.

ACTIVITIES:

Introduction

1. Give the class the following opening examples:
   a. If $8,394.60 is divided by $29.17 the result is most nearly
      1. 288   2. 347   3. 2880   4. 3470
   b. The Health Department reported that 8 out of 12 children had the measles this spring. What fraction shows the proprtion of children that had measles?
      1. 8/20   2. 2/3   3. 1/8   4. None of these
2. Elicit from the class the solution to these previous problems. (Note: This lesson is intended as one of the final lessons or the final lesson of a unit consisting of performing operations with fractions and decimal fractions.)
3. Discuss with the class the importance of the given problems. These examples are direct applications of the material the students have been studying and were taken directly from a Civil Service Examination.

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*The curriculum concept is found in the teacher's notes.

(Note: It may be necessary here to explain the concept of Civil Service and the purposes of Civil Service Examinations, if not done so previously.) This should show the class that computational skills are both necessary and required tools in various job fields. This concept should be elicited as the aim of the lesson.

Tasks

1. Ask the class to volunteer specific jobs that they can think of which use computations with fractions and/or decimal fractions. Discuss with the class why such computations are necessary in the specific job(s) named. For example:
   a. clerk - needed for filing and cataloging
   b. cashier - needed for activities with money
   c. accountant - needed for computing taxes
   d. chef - needed for transposing recipes
2. With the class solve a set of examples involving fractions and decimal fractions taken from the Civil Service Examinations, telling the students which specific job exam each example was taken from. For example:
   a) What is fifty-two ten-thousandths written as a decimal?
      1. 52,010,000 2. .052 3. .0052 4. None of these
   b) What is the equivalent decimal of the fraction 7/8?
      1. .785 2. .675 3. .575 4. .585 5. None of these
   (Note: Examples (a) and (b) are taken from the Beginning Office Worker Exam.)
   c. The sum of 284.5, 3016.24, 8.9736 and 94.15 is most nearly
      1. 3402.9 2. 3403.0 3. 3403.9 4. 4036.1
   (Note: Example (c) is from the Clerk Exam.)

Summary

1. Have each student list 5 jobs requiring computational skills with fractions and decimal fractions.
2. Give the students a set of examples involving fractions and decimal fractions (see Task 2).

RESOURCES:

New York State Civil Service Examinations

EVALUATION:

Examination: Part I: List 5 jobs which use computations involving decimal fractions and fractions.
Part II: Solve the 25 examples below (Note: problems should be from Civil Service Examination in the areas of fractions and decimal fractions).

Mathematics - Grades 9-10
"Numbers and Numeral Systems"
Jess Resnick

CURRICULUM CONCEPT:

Session 1: a. To understand the concept of one-to-one correspondence as exemplified by counting methods.
b. To understand the difference between number and numerals.

Session 2: To understand the use of Egyptian and Roman numerals.

Session 3: To understand the use of the decimal numeration system.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	The student will name eight occupational fields in which concepts of number systems may be used.
Attitudes and Appreciations	The student will explain why and how different specified civilizations of man used these individual numeration systems.
Skill Competency and Educational Awareness	The student will correctly identify the numbers represented by a set of five Roman numerals in a career-oriented example.
Skill Competency and Educational Awareness	The student will correctly list the Roman numerals which correspond to five given numbers in a career-oriented example.
Skill Competency and Educational Awareness	The student will correctly identify the numbers represented by a set of five Egyptian numerals in a career-oriented example.
Skill Competency and Educational Awareness	The student will correctly list the Egyptian numerals which correspond to five given numbers in a career-oriented example.

Note to Instructor: The following instructional sequence which introduces the topic of numbers and numeral systems is presented as a three session plan. However, different teachers and classes of varying abilities may stray from the time guide presented here. Nevertheless, all the key points listed should be covered in detail, allowing for the successful meeting of the specified career education objectives.

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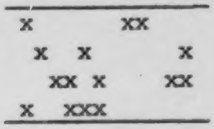
*The curriculum concept is found in the teacher's notes.

ACTIVITIES FOR SESSION ONE:

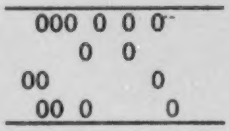
Introduction

1. Give the class the following example:
   Which collection of items (a) or (b) has the greater collection of items?

a.



b.



2. Discuss with the class how they arrived at their answer to the given problem. Tell the class that the unit they are starting will deal with counting, numbers and numeral systems.

Tasks

1. Initiate a discussion about counting - how and why man counts. Key points to cover would be that a means of indicating quantity is a necessity to man and that counting has changed in method over the ages. In this regard, give the class examples of how the needs and situations of primitive man related to his counting methods. e.g.
   a. Fingers held up may have signified a number of objects caught while fishing.
   b. A simple hunting and fishing existence did not need a complicated means of representing numbers. (Note: Elaborate on this fact, if necessary.)
   c. Pebbles or twigs may have been used to check how the number of animals a man owned varied from day to day by matching the collection of twigs with the collection of animals daily.
2. Allow task(1) to lead into the presentation of the concept of one - to - one correspondence. (This may be illustrated by various means such as matching each finger on one hand to each student in a row of the class.) Define one - to - one correspondence. Show how counting, in general, and early counting methods, specifically, use one - to - one correspondence.
3. Show and do with the class various illustrative examples involving one - to - one correspondence.
   e.g. Indicate whether the given sets of objects can be matched one - to-one:
      a. The days of the week
      b. The months of the year
4. Put the phrase "five apples" on the board. Ask the students to identify what is on the board. After the correct response, ask a pupil to eat one of those "five apples". Let this lead to a discussion of numbers as abstract ideas. Numbers are referred to by the use of symbols we call numerals. Define number and numeral for the class. Relate this to counting.

Summary

1. Give the class a set of examples to do involving one - to - one correspondence (see Task 3.)
2. Ask the class why primitive man used the counting system he did.

ACTIVITIES FOR SESSION TWO:

Introduction

1. Put the following problem on the board for the class to consider:
   If the symbol | stands for our number 1, and the symbol ∩ stands for our number 10, what number will be represented by the numeral ∩∩|||?
2. After agreeing on the answer with the class, tell them that the numerals used were from the Egyptian system of numeration and that the students will now learn about the Egyptian and Roman systems.

Tasks

1. Discuss and develop with the class the reasons Egypt needed a different system of numeration (of counting) than did primitive man. Show how their needs and situations led to development of their system.
   e.g. a. Increase in the number of objects to be counted (population, etc.) - need for symbolic representation of large numbers.
   b. Exchange of facts and figures - need for transportability of numerals.
2. Show the class the basic symbols and picture numerals (hieroglyphics) used in the Egyptian numeration system (a table is suggested) and how to use these symbols in coordination with principles of repetition and addition to represent numbers.
3. Do examples with the class converting Egyptian numerals to decimal notation and vice versa: e.g. Express 2,310 as an Egyptian numeral.
4. Discuss and develop with the class reasons Rome developed their own system of numerals, showing needs and situations as causal factors.
   e.g. a. Increasing size of countable objects - need for easier manipulative system;
   b. Need for easier construction and writing of numerals.
5. After reviewing the symbols and principles used in the Roman system, do examples with the class converting Roman numerals to decimal notation and vice versa (a career-oriented example is suggested):
   e.g. As a stonecutter you get a request to carve the date of a building's construction on a cornerstone. As it is common practice to use Roman numerals for such dates, what Roman numeral should be carved for 1973.
6. In light of the previous discussion, talk to the class about occupational fields which may use various number systems.
   e.g. a. Matchmaking
   b. Book publishing
   c. Movie making

Summary

Give the class a set of examples converting to and from the Roman system and the Egyptian system.

ACTIVITIES FOR SESSION THREE:

Introduction

1. Challenge the class with the following example: Add: XIV+VII+CI+XXX.

2. After eliciting an answer (decimal and/or Roman) from the class to the opening problem discuss any difficulties the students may have had in organizing the numerals. Tell the students this need for organization while performing arithmetic operations was one of the reasons for dropping the Roman system.

Tasks

1. Briefly discuss how and why Hindu-Arab numerals (the decimal system) developed while reviewing some of the basic features. Once again stress how needs and situations were factors in its development: e.g. a) ever increasing number of countable objects - need for simpler means of symbolic representations; b) need for a scientific, organized approach to computations (i.e. place value). "Digit", "place value", "decimal," and "base ten" are some of the terms that should be defined and illustrated here.
2. Give the class a few examples making use of the terms introduced in task (1): e.g. a. write as a sum showing place value:
   324 (answer: 3(100) + 2(10)+4)
   b. write a numeral to represent: five thousand, nine hundred six (answer: 5906)

Summary

(Note: It is suggested that a summary of the complete instructional sequence take place at this time stressing the proposed career education objectives concepts. Thus, this summary may take a considerable amount of time.)

1. Have the class discuss in depth how changing needs and changing situations affect computational development. The systems of primitive war, Egypt, Rome and today should be discussed and compared. Future systems may be contemplated.
2. Uses of various concepts of number systems (numerals) in specific occupational fields should be discussed by the class. In this regard, examples referring to such jobs should be solved by the students (see Session 2, Task 5).

EVALUATION:

Examination: The student will be asked to meet the listed career education objectives.

Mathematics - Grade 9
"The Numbers of Arithmetic"
Richard Volo

CURRICULUM CONCEPT:

To understand the origin of numbers and the symbols we use for numbers, and a classification of the different types of numbers.*

RELATED CAREER EDUCATION CONCEPT:

To develop a better understanding of how changes in society have led to a development of many number systems and specialized occupations through progressive stages.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	The student will describe how our numbers originated in prehistoric times based on counting.
Educational Awareness and Skill Competency	Given a list of occupations, the student will construct a sample math problem associated with each.

ACTIVITIES:

Introduction
Ask students why we have numbers. Provide a brief discussion about the purpose of the lesson and why it is valuable to study about numbers.

Tasks
1. Begin with a discussion as to how our numbers originated in prehistoric times based on counting.
2. Review with the students the difference between a number (idea) and a numeral (symbol). Give examples of some numerals which have been used in the past, e.g., Egyptian, Roman, etc.
3. Demonstrate the need for fractions, decimals, and negatives, which arose as man became more civilized.
4. Ask students if they can identify occupations which deal mainly with counting numbers, fractions, decimals, negatives, etc.
5. Discuss how these numbers are used in different industries today.

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*The curriculum concept is found in the teacher's notes.

6. Give students a list of problems and ask them to identify related occupations.

Examples:	Possible Pupil Responses:
a) $2.78 .89 + 1.63	-Grocery store cashier, shipping clerk, cost estimator
b) $4.75 x 10	-Hourly workers, business owner
c) ½ + 3/4	-Carpenters, manufacturers
d) $100 - 300	-Accountants, bankers
e) 6% of 100	-Teachers, bankers, salesmen

Summary

Review with students the purpose of the lesson.

RESOURCES:

Current textbook

EVALUATION:

1. Students should be able to construct a sample math problem which is typical of the problems solved by people in particular occupations. Suggested occupations should progress from cave man to present day worker.
2. Students should describe in one paragraph how numbers originated.

Mathematics - Algebra - Grade 9
"Different Methods of Solution"
Richard Volo

CURRICULUM CONCEPT:

To understand the various methods possible to solve equations which have a variable in both members.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of individual differences and how, very often, there may be many different ways of achieving the same result.

THEMES AND OBJECTIVES:

Themes	Objectives
Self awareness	The student will describe how differences may achieve similar results.
Decision making	The student will describe that to any problem there may be many solutions.
Skill competency	The student will solve equations which have a variable in both members.

ACTIVITIES:

Introduction

1. Elicit from students some well known people and inventors and their accomplishments which, in their time, seemed very radical. Examples:

Famous Historical Figures	Accomplishments	Comments Used to Ridicule Ideas
a. William Seward	buying Alaska	"Seward's folly"
b. Robert Fulton	steamboat	"Fulton's folly"
c. Christopher Columbus	discovery of America	"world is flat"
d. Wright Brothers	airplane	"if man was meant to fly, he would have been born with wings"
e. Henry Ford	automobile	"get a horse"
f. Betty Friedan	women's liberation	"All men are created equal"

2. Stress the value of these contributions in bringing progress to our world today.

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* The curriculum concept is found in teacher's notes.

"Different Methods of Solution"

Tasks

1. Elicit examples of common tasks and the different ways they are completed:

Suggested Tasks	Possible Solutions
a. writing	left handed or right handed pen or pencil
b. sports	various football plays different swimming strokes
c. transportation	bus, train, car, bike, or walking Cadillac vs. Volkswagen
d. manufacturing	hand-made shoes vs. machine made shoes
e. education	new math vs. old math communication arts vs. English

2. State that in mathematics there are also different methods to solve a problem. Present various equations of the type with a variable in both members and illustrate some different approaches to the solution of each: Example: $4N + 10 = 9N - 50$.

Method I	Method II
$4N + 10 = 9N - 50$	$4N + 10 = 9N - 50$
$\quad - 10 \qquad - 10$	$-4N \qquad -4N$
$4N = 9N - 60$	$10 = 5N - 50$
$-9N \qquad -9N$	$+ 50 \qquad + 50$
$-5N = - 60$	$60 = 5N$
$N = 12$	$12 = N$

3. Consult current textbooks for additional practice problems of this type.

Summary

Students should be encouraged to place their solutions on the chalkboard, each demonstrating various methods of solution. Stress that any sound solution is acceptable.

RESOURCES:

1. Current textbook - Additional practice problems can be found in: Comprehensive Ninth Year Math, Isidore Dressler, Amsco School Publications, Inc.;
2. Pictures of various early inventors
3. Short histories of famous inventors.

EVALUATION:

1. Students should be able to solve this type of equation. A quiz could be given and then have students exchange papers and grade each other's solutions. Teacher should stress that all correct solutions must be accepted.
2. Have students describe two individuals who approach the same problem in different ways in achieving the same outcome.

Mathematics - Grade 9
"Uses of Numbers - Measurement
Richard Volo

CURRICULUM CONCEPT:

To understand different units of measure and the various tools used to measure.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of how different units of measure are used in certain occupations and the various degrees of accuracy necessary.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. Given various measuring instruments, the student will be able to identify occupations which can be associated with each.
Skill Competency	2. The student will match the current measuring tool to a task, considering the accuracy required.

ACTIVITIES:

Introduction
Provide a discussion about the aim of this lesson and a reason for studying.

Tasks
1. Have students measure the tops of their desks, one text book which most students have with them, and ask them to estimate the width of the room. Let them use as many measuring instruments as possible. (Ruler, steel tape, yardstick, carpenter's rule, architect's and engineer's scale)
2. Let students list their results and compare their measurements. A discussion should follow examining some of the reasons for differences, and which instrument is the most accurate for the task.
3. Demonstrate different measuring instruments and compare accuracies of each.
4. Guide students in the identification of occupations in which each instrument is used, noting the limitations of accuracy in each.
   Examples:
   a) Steel tape - Carpenters, brick layers, surveyor, carpet layers
   b) Yardstick - Dressmaker, students, hardware store
   c) Caliper - Engineers, machinist, mechanic, chemist
   d) Stop Watch - Horse trainer, sports, scientist, timekeeper
   e) Voltmeter - Television repairman, mechanic, scientist

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* The curriculum concept is found in teacher's notes.

5. List some basic measuring tasks and allow students to suggest the best instrument for that task.
   Examples:
   a) Measuring the diameter of a ball bearing
   b) Constructing a box
   c) Baking a cake
   d) Making a dress
   e) Selling wire in a hardware store
   f) Drafting a blueprint

Summary

Explain to the class that they have had an opportunity to use a variety of measuring devices. They have seen that some are more useful than others. The object to be measured will usually determine the type of measuring tool to be used and the use of these tools is necessary for certain workers. They have identified occupations in which certain types of measuring tools are used.

RESOURCES:

Free charts and pamphlets dealing with the nature of approximation and precision are issued by many commercial organizations, such as Ford Motor Co., Chrysler Motors Corp., Lufkin Rule Co.

Materials needed: Measuring instruments of various types, watches (wrist and stop watches, hour glass), calipers, micrometer, gauges, if possible.

EVALUATION:

1. Students should be able to identify each measuring instrument presented and be able to list objects and occupations in which each is used.
2. Students should be able to select which activity of each pair requires greater precision:
   a) Making a dress; building a radio
   b) Compound a prescription; baking a cake
   c) Being on time for school; launching a satellite
   d) Tuning an engine; building a house
   e) Flying an airplane; sailing a boat

Mathematics - Grade 9
"Verbal Phrases and Mathematical Symbols"
Richard Volo

CURRICULUM CONCEPT:

To understand the method of expressing verbal phrases and sentences by using mathematical symbols.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of the need for the specialized language and symbols which are used in industry. To understand that learning this vocabulary is one more phase of the continual developmental process.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	The student will translate English sentences into mathematical equations and vice versa.
Attitudes and Appreciations	The student will describe the importance of giving specific meanings to words.

ACTIVITIES:

Introduction
Explain to the students the purpose of the lesson and the reason for studying.

Tasks
1. Start a discussion on the importance of vocabulary to people in certain occupations. Ask students if they know the common and specific meanings of the following words:

Common words	Specific Occupational Uses
sleave	Basic term used by telephone technicians - a wire that carries control functions.
chicken steak	A butcher would know that this is actually a certain cut of beef.
trimming	Is done by a builder to make an excavation ready for the foundation.
PM	Premium money - commission to salesmen for pushing certain items.
union	A plumber would know that this is a certain type of pipe which allows a piping system to be taken apart.

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* The curriculum concept is found in teacher's notes.

"Verbal Phrases and Mathematical Symbols"

STP	Standard temperature and pressure used by scientists.
plate	A carpenter would think of this as one of the rafters in the roof of a building.

Teacher should stress that, very often, common words take on specific meanings which are only found in the context of certain occupations.

2. Explain that mathematics also contains a vocabulary and symbols which must be understood and agreed upon by all. Elicit from the class a list of English words which are used to convey the meaning of the four basic operations: addition, subtraction, multiplication, and division.
3. Give students practice in writing English equivalents of mathematical symbols, and expressing English sentences into mathematical symbols.

Summary

Stress that many problems in algebra, and also in industry, are solved by first translating the written problem into various symbols.

RESOURCES:

Current text

EVALUATION:

A short quiz would be given to evaluate the students' ability to relate English words to mathematical symbols.

Mathematics - Grade 9
"Constructing and Reading Bar Graphs"
Richard Volo

CURRICULUM CONCEPT:

To understand the method of constructing a bar graph from given information.*

RELATED CAREER EDUCATION CONCEPT:

To explain the different types of educational preparation necessary for various careers.

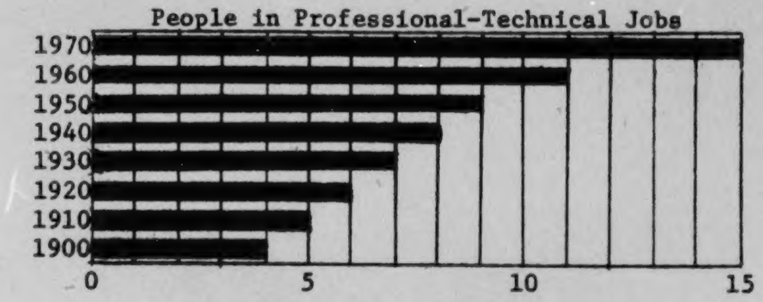
THEMES AND OBJECTIVES:

Themes	Objectives
Skill competency	The student will construct a bar graph from given information.
Skill competency	Given a graph, the student will identify the general trends indicated.
Educational awareness	Given occupational categories, the students will describe why there are people with various educational backgrounds included in each.

ACTIVITIES:

Introduction

1. Discuss how the demand for professional and technical workers has been rising since the beginning of this century. Present the following information:
   The number of professional-technical workers per 100 workers since 1900
   1900 - 4 1920 - 6 1940 - 8 1960 - 11
   1910 - 5 1930 - 7 1950 - 9 1970 - 15
2. Present this information on a bar graph, demonstrate the usefulness of a bar graph in making general comparisons and showing general trends.



* Taken from text cited

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* The curriculum concept is to be found in the textbook, Problem Solving Mathematics; Kenney, Ruble and Brown; Holt, Rinehart & Winston, Inc.; New York, 1972.

3. Elicit from the students the meaning of a professional-technical job, and have them cite examples.

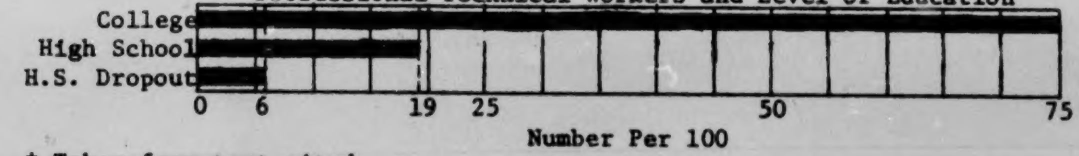
Tasks

1. The class should construct the bar graph below following these steps: (from text)
   a) Using graph paper, choose a scale that will show the largest number.
   b) Label the unites along the bottom of the graph if the bars are to be horizontal, or along the left side if they are to be vertical.
   c) Draw the bars to scale, leaving spaces between bars at least as wide as the bars.
   d) Give the graph a title, and label the bars, so that the graph can be understood by anyone.

   Example: Education of 100 workers in professional-technical jobs:*

Less than high school	High school graduate	College
6	19	75

Professional-Technical Workers and Level of Education



* Taken from text cited.

2. Summarize the information from this graph in these areas:
   a) What is the general educational trend?
   b) Which category were you surprised to see included in this list? Why?
   c) Which professional-technical occupations can be entered without college? Without a high school diploma?
3. Introduce these general career categories and have students recall the information from the professional-technical graph.
   The number of workers per 100 with each level of education in other occupations is shown in this table.

Occupation	Less Than High School	High School Graduate	College
Proprietors and managers	38	33	29
Clerical and sales	25	53	22
Skilled workers	59	33	8
Services	69	25	6
Semi-skilled	70	26	4
Unskilled	80	17	3

* Taken from text cited.

4. Elicit from students examples of occupations in each category.
5. Let each student pick a category and construct a bar graph using the information given.

"Constructing and Reading Bar Graphs"

Summary

1. Teacher should allow comparisons between student graphs and the original information. The advantage of a graph in highlighting the general trends more clearly should be stressed.
2. The educational trends in each occupational category should be noted. Using examples of occupations in each category, students should discuss which require further education.
3. Elicit from the students their opinions on why we find college graduates in every category. It should be stressed that often the demand for educated people is low.
4. Students should also understand that high school drop-outs do find positions in every category, but they may find that occupations open to them are limited.

RESOURCES:

Graph paper

Note: Much of the material in this lesson lends itself to reproduction as transparencies for use with an overhead projector.

EVALUATION:

1. The student should be able to construct a bar graph.
2. He should also be able to analyze the information given and identify the general trend.
3. Give two occupational categories with varying educational backgrounds in each and have student write in 100 words a description as to why this is the education required.

Mathematics - Algebra - Grade 9
"Dry Mixture Problems"
Richard Volo

CURRICULUM CONCEPT:

To understand the method used to solve dry mixture problems.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of the role of mathematics as a tool inmaking decisions most consistent with his goals.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational awareness	The student will illustrate the need for mathematical principles in the retail sales industry.
Skill Competency	The students will solve problems similar to those encountered by retail merchants.
Decision making	The students will describe how mathematical concepts can be used as decision making devices.

ACTIVITIES:

Introduction
Propose the question: How can mathematics help you in making decisions? Explain the purpose of the lesson.

Tasks
1. Ask the students if they can list some of the occupations involved in the production of candy. This should lead to a discussion tracing the manufacturing of candy from the production and processing of the raw materials to the packaging and advertising of the final product.
2. Throughout this discussion the students should realize that the value of the candy increases as each progressive step is completed and that many factors are involved in computing price.
3. The retail merchant can be seen as the last step in this process. Students should be aware of some of the factors which guide the merchant in setting the price of candy, e.g. cost of candy, expenses, profit. The teacher should stress that the price is limited by what consumers will pay for the item.
4. Inform the students that the following problem will illustrate the use of mathematics in decision making.

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* The curriculum concept is to be found in teacher's notes.

"Dry Mixture Problems"

5. Present the problem of the merchant who has two types of candy, each of different quality and value. Guide the students to understand that most people do not want to pay the high price for the expensive one, but also want a better quality than the less expensive type.
6. Elicit from the students that a possible solution would be to mix the two types of candy. Example: Price consumers are willing to pay - 75¢ per pound. Number of pounds of candy that can be sold - 30 pounds. If the expensive candy is priced at 80¢ a pound, and the less expensive candy is priced at 50¢ per pound, how many pounds of each type should be mixed together?
   Teacher should illustrate how this problem can be solved using mathematical methods.
7. Teacher should consult current textbooks for additional practice problems which deal with various products (mixing nuts, coffee, gasoline, etc.)

Summary

Stress that this is only one example of how algebra can be applied to industry. Elicit from the students other possible applications of algebra in their own daily living.

RESOURCES:

Current textbook - Additional problems of this type can be found in:
Comprehensive Ninth Year Math, Isidore Dressler, Amsco School Publications
Contemporary Mathematics, Helen Halliday, William H. Sadlier, Inc.
Note: Additional material from: M&M - Mars Candy Co.; Hackettstown, N.J. 07840

EVALUATION:

1. The students should be able to provide algebraic solutions to problems in which the mixture of two or more different quantities is involved.
2. Have students list five ways mathematical concepts can be used for making decisions.

Mathematics - Grade 9

"Computing Wages Through Different Mathematical Methods"

Richard Volo

CURRICULUM CONCEPT:

To compute wages through mathematical methods*

RELATED CAREER EDUCATION CONCEPT:

To become familiar with the relationship between personal economics and different occupational roles. To understand the rewards of certain occupational roles.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill competence and Educational awareness	The student will identify the various ways employees are paid.
Skill competency	The student will compute salaries, hourly wages, piece work, and commission.
Economic awareness	The students will decribe how the method of payment affects the way in which a person performs the tasks.

ACTIVITIES FOR SESSION ONE:

Introduction

1. The class should be asked to list some occupations which they are familiar with, e.g. teacher, carpenter, salesman, dress maker, doctor.
2. A discussion should follow as to the different ways people in these occupations are paid, e.g. salary, hourly wage, piece work, commission, fees.
3. Elicit from students that the type of work usually determines the method of payment (from text).

   Note: Each of these methods should be explored in more detail, allowing students to work problems which are examples of the type of mathematics that may be used for each. It is equally important to allow students to form their own opinions as to which method of payment seems most agreeable to them.

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* The curriculum concept is found in the curriculum bulletin, General Mathematics - Ninth Year, Bureau of Curriculum Development, The Board of Education of the City of New York, 1968.

"Computing Wages Through Different Mathematical Methods"

Tasks

The following tasks are on salary:

1. The students should understand the meaning of salary as a fixed sum of money for a period of time, usually a month or year. Salary does not allow for "overtime".
2. Lead the pupils to understand the methods of solution of typical problems faced by a person who is salaried. Examples:
   a. Mr. Smith receives a salary of $500 per month. How much does he earn per year?
   b. Who earns more, a person who earns $120 per week, or a person who earns $480 per month? Note: Students should realize that four times a weekly salary is not the same as a monthly salary.
   c. A teacher received a salary of $8,320 per year. What were his earnings per month? What was his salary per week?
   d, A policeman earns $150 per week. What is his yearly salary? Note: Teacher should supply additional examples from current textbooks.
3. Elicit from the students their opinions on how their lives would change if they were paid $2,000 a year to go to school? What if they were paid $10 a day?

The following tasks are on hourly wage:

4. Students should understand that hourly wages depend on the actual number of hours working and the rate per hour.
5. Expose students to a good number of practice problems. Examples:
   a.

Hours	Rate	Wages
8	$2.00	
6	$3.25	
4 hrs. 30 min.	$1.50	
8 hrs. 15 min.	$1.00	

   b. A bricklayer works 7 hours per day, from Monday to Friday, and is paid $5.75 per hour. How much did he make this week? Is that amount the same every week? Why?

Summary

Allow students to express the advantages and disadvantages of "salary" as compared to hourly wages. Lead pupils to realize that a salary person may have a different outlook on his job than an hourly wage earner. Be sure to include examples of occupations in each category.

ACTIVITIES FOR SESSION TWO:

Introduction

Review some of the advantages of hourly wages as compared to salary. Elicit from the students the advantage of "overtime pay" for the wage earner. Provide explanation of aim of session two.

Tasks

1. Illustrate the methods of calculating overtime wage at the rate of "time and one half". Example:

Regular Wage	Overtime Wage
$2.00	$3.00
$ .90	$1.35
$2.50	$3.75

"Computing Wages Through Different Mathematical Methods"

Allow students to compute actual daily wages including overtime (premium hours). Example:

Regular Hours	Regular Rate	Wage	Premium Hours	Overtime Wages	Total
8	$2.00	$16.00	2	$4.00	$20.00
6	$ .90				
4	$2.50				

2. The following example could be used to illustrate the importance of overtime pay: Mr. Waters is a steam fitter. His regular work day is five hours long for which he is paid $4.60 per hour and time and a half for overtime. Find his earnings for this week. Monday, 8 hours. Tuesday, 6 hours. Wednesday, 7 hours. Thursday, 8 hours. Friday, 5 hours.
3. Practice problems of this type should be presented.

Summary

Remark that students would be paid $2.00 per hour and time and one half spent doing homework. Elicit from pupils opinions on how this would affect their life. From this, lead the students to an understanding of the different life-styles of people who have occupations in these areas.

ACTIVITIES FOR SESSION THREE:

Introduction

Review that some people do not work for a fixed salary or for the amount of time spent on the job. Elicit from the students the other ways in which people are compensated for work.

Tasks

The following tasks are on piece work:

1. Lead pupils to understand that some people are paid only for the actual number of pieces produced, and not on time spent.
2. Discuss that the rate per piece differs greatly with what type of item is being produced. Suggested examples:
   a. Baseball bats are produced at the rate of $1.10 each. If an experienced worker can make 105 bats in a week, how much money will he receive? If he makes 126 bats? If he makes 185 bats?
   b. Mrs. Smith is paid 75¢ for each dress she makes. How many dresses will she have to complete for her to receive $100? To receive $150?
   c. Mr. Adams puts watches together for which he is paid $9.75 each. How many watches does he have to finish to earn $100? To earn $150? Why is Mr. Adams paid more than Mrs. Smith? Who makes more money per week?
   Note: Teacher should stress that a person who works diligently can possibly earn more with piece work than if they were on salary or hourly wage.
3. Students should be given additional practice in computing piece work wages.

The following tasks are on commission:

4. Pupils should be familiar with the meaning of commission and some occupations in which commission is the basic form of payment, i.e. real estate salesmen, insurance salesmen, stock brokers, etc.

5. Students should be given appropriate practice problems in computing commissions.
6. Elicit from students that workers whose wages are based on commission have no fixed income. Example: An insurance salesman makes $40 a week plus 5% commission on all sales. Last week he sold a $10,000 insurance policy. How much did he earn altogether? This week, the salesman made no sales at all. How much did he earn?
7. Discuss briefly the advantages and disadvantages of piece work and commission forms of payment. Elicit student opinions on how each method would affect their lives.

Summary

Briefly review each of the methods for computing wages which were studied. Be sure to include student opinions of the advantages of each. Review all three sessions' purpose.

RESOURCES:

Make up work sheets with practice problems appropriate to the level of the class. It may also be helpful to show the class examples of time cards and payroll registers.

EVALUATION:

1. Students should be able to list and briefly describe the various ways employees are paid.
2. Students should have the ability to compute simple salary, wage, and commission problems.
3. Students should be able to pick which method they prefer, and three reasons why. Also, which method they would not like, and three reasons why.

Mathematics - Grade 9
"Mathematics in Relation to Banking"
Richard Volo

CURRICULUM CONCEPT:

To understand the mathematical skills which are necessary to use the banking system effectively.*

RELATED CAREER EDUCATION CONCEPT:

To develop some of the skills needed to manage personal finances and to become aware of the services and occupations available through the banking system.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness and Econcomic Awareness	The student will demonstrate an ability to use good mathematical skills in the area of banking.
Economic Awareness	The student will identify the services which are offered by banking institutions.
Career Awareness	The student will be able to describe some of the jobs available in a bank.

ACTIVITIES: (First Session)

Introduction
Lead the students to discuss their past experiences in saving and spending money.
Example: When Bert began working, he decided to save a part of his pay check each week. Bert placed these savings in a shoe box under his bed.

a. Was Bert wise to save part of his money?
b. Is the shoebox a good place to put his savings? Why?
c. Where would you advise Bert to keep his savings bank? Why?
(He is less likely to spend it, money is safe, he earns interest on his deposit.)
d. What proof does Bert have that he has money deposited in the bank?

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*The curriculum concept is found in the Curriculum Guide, Teaching Mathematics in Junior High School, Board of Education of the City of New York, 1969.

"Mathematics in Relation to Banking"

Tasks

1. Present to the students examples of a deposit slip, withdrawal slip, and a page from a passbook. Explain the function of the various columns and the meanings of the headings. Allow students to practice filling out these forms, placing emphasis on writing numbers in words.

Examples:

(a.) Bert deposited $10.75 in cash and three checks into his savings account. One check for $13.50, another for $5.73, and the third for $6.92. Fill out a slip for this deposit.

(b.) Bert's balance was $107.32. What is his new balance.

(c.) Bert receives interest at the rate of 4% per year, or 1% every three months. How much interest will Bert receive after three months? What is his balance now?

Note: Explain the different types of savings accounts available and some of the advantages and disadvantages of each.

Summary

Stress that savings is only part of the banking system. Have students interview their parents or visit a bank to familiarize themselves with the other services offered by a bank. The following questionnaire can be used as a guide for collecting this information. (See attached sheet)

ACTIVITIES: (Second Session)

Introduction

Elicit from the students the meanings of the terms presented on the questionnaire. Allow students to expand their knowledge of the banking system.

Tasks

1. Review with students the information required when writing a check and the correct format which must be used. Stress the math skills needed to do this. Be sure to include filling out the check stub and examining a bank statement for mistakes.
2. Explain the distinctions between payer and payee, and endorser and endorsee. Allow students to exchange sample checks and play the role of each.
3. Briefly discuss with the students what happens to a check after it is presented for collection. Explain the function of the clearing house. (Materials are available from the Federal Reserve Bank for this topic.)

Summary

Allow students to evaluate for themselves their interests in the area of banking. Discuss some of the aspects of working in a bank, both positive and negative.

"Mathematics in Relation to Banking"

Examples:

Positive	Negative
Providing a service to people	Dissatisfied customers
Pleasant working environment	Indoor work
Non-physical work	Accuracy demanded

RESOURCES

1. Pamphlets describing various banking services are available from local banking institutions (the Chase Manhattan Bank prints a very helpful booklet, Checking Account Handbook).

2. Samples of the various forms used by banks should be made available to the students.

3. Student questionnaire.

EVALUATION

1. Students should be able to fill out the bank forms studied.
2. The student questionnaire could also be used as a post-test to evaluate the students' knowledge of banking services.
3. Have students list ten occupations in a bank setting.

COMMERCIAL BANK QUESTIONNAIRE

Name: ____________________ Source of Information: __________

1. Do banks contribute to the wealth of the community? In what ways?

2. Here are some services to ask about at a commercial bank. Can you identify the main purpose of each?

   a. savings accounts ____________________
   b. savings bonds ____________________
   c. safe deposit box ____________________
   d. bank-by-mail ____________________
   e. drive-in-windows ____________________
   f. checking accounts ____________________
   g. paying-by-check ____________________
   h. cashing checks ____________________
   i. installment loans ____________________
   j. mortgage loans ____________________
   k. commercial loans ____________________
   l. credit cards ____________________

3. What is the government role in banking?

4. How does the bank make money?

5. List the occupations that are available at the bank.

6. Which aspects of working in the bank do you like? Which do you not like?

Mathematics - Grade 10, 11
"Venn Diagrams in an Occupational Context"
Donald Matos

CURRICULUM CONCEPT:

To understand set intersection and set union.*

RELATED CAREER EDUCATION CONCEPT:

To use mathematical concept problems in a career education context.

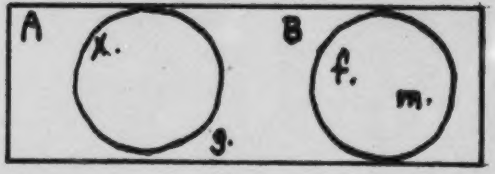
THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	Given occupations chosen by students in class, the students will draw Venn Diagrams to show inter-relationships between occupations.

ACTIVITIES:

Introduction

Explain concept of Venn diagrams: A Venn diagram is a diagram which uses circles to represent sets. The elements of a set being written inside the circle. For example.

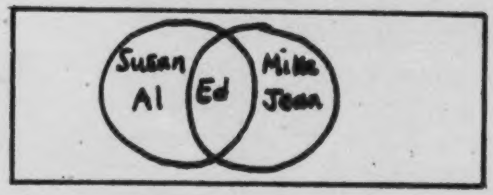


(x,f,m,g are elements; A and B are sets)

Have students volunteer to interpret the diagram.

Tasks

1. Draw the following diagram. Have students volunteer to explain the diagram using the notion of membership as having worked in a particular occupation. Ask students to consider Ed's position in the diagram.



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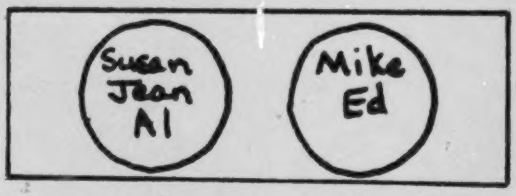
*The curriculum concept is found in the teacher's notes.

2. Introduce the term intersection, elicit a definition from the students. Ask which part of the diagram represents the intersection. Explain that this is the part that is to be shaded. (Shade the part that looks like Ed).
3. Have students draw Venn diagram where there is no intersection. Ask students to explain their diagrams by deciding upon what will be meant by membership (i.e. Susan, Al, Ed, Mike and Jean may belong to the same organizations, clubs, teams, church). Student volunteers to draw diagram on board.



One interpretation: Susan, Jean, Mike, Ed, and Al make up a rock group. Why are they in different circles? What similar life-work styles can you think of?

Summary

Elicit definition of union from students. As a final activity, ask students to interpret the Venn diagram as a union by first shading the entire circular region.

EVALUATION:

1. Have students explain the distinction between intersection and union of sets.
2. Give students a set of occupational data and have students draw Venn diagrams to show inter-relationships.

Mathematics (Learning Disability) - Grades 9, 10
"Measuring Occupational Interests Using Ratio"
Donald Matos

CURRICULUM CONCEPT:

To figure ratios.*

RELATED CAREER EDUCATION CONCEPT:

To begin developing both an occupational and an educational awareness in students.

THEMES AND OBJECTIVES:

Themes	Objectives
Self awareness	The student will identify a tentative occupational choice and describe the factors which influence that choice.
Educational awareness	Given occupations chosen by students in the class, the students will compute ratios of the figures in the table.

ACTIVITIES:

Introduction

Surveys class to find occupational interests of each student. Put these occupations in table form like the following example:

JOB PREFERENCES

Job	Men	Women	Total
actor	10	7	17
patrolman	4	1	5
salesman	7	4	11
custodian	11	10	21
nurse	2	12	14
attorney	10	6	16
waiter	1	0	1

Ask why we have chosen a career interest and identify what lead to such interests.

Tasks

Have students explain how the above table may be used (i.e., to make comparisons). Teacher defines what is meant by ratio. Students are asked to make ratios with the above numbers and to explain what they are comparing.

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* The curriculum concept is to be found in teacher's notes.

"Measuring Occupational Interests Using Ratio"

For example, in a class of 30 students, ten men want to become attorneys while six women wish to become attorneys. This is a ratio of 10/6 or 5/3.

Summary
Students list occupation of choice and four factors which influenced that choice. Compute ratios.

RESOURCES:

None

EVALUATION:

1. The student will write a paragraph indicating a tentative career choice and describe factors which are influencing that possible choice.
2. The student will compute ratios using occupational data.

Mathematics (Learning Disability) - Grades 10, 11
"Pictograms in an Occupational Context"
Donald Matos

CURRICULUM CONCEPT:

To construct and interpret pictograms.*

RELATED CAREER EDUCATION CONCEPT:

To begin developing both a career and an educational awareness in students through the use of pictograms.

THEMES AND OBJECTIVES:

Themes	Objectives
Career awareness	The student will describe growth trends in occupations.
Educational awareness	The student will illustrate through pictograms occupational data which will show growth trends for each occupation listed.

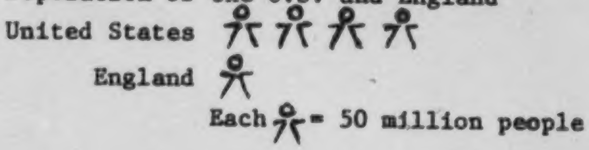
ACTIVITIES:

Introduction

Initiates a discussion as to how business was conducted before the advent of paper money. Elicits the basic principle involved using a student to write it on the board (i.e. use of objects to represent things of value which the seller demands for the trade for the object of sale). For example, during a trade between two primitive tribesmen, the buyer shows 20 pebbles to the seller. He points to some cattle. What does the buyer mean? What might he be buying?
The buyer was trying to draw a picture of what he was willing to give for the object of sale.

Tasks

1. Use pictures of little man figures (i.e.) to show a "future growth" relationship similar to the one shown on the overhead projector:
   Population of the U.S. and England



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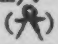
* The curriculum concept is found in teacher's notes.

"Pictograms in an Occupational Context"

2. Devise four pictures of different consumer items and use them to show "projected" needs for the item (i.e. , ham).
3. Choose four occupations and use little men () to show future growth in that occupation. Can you think of an occupation where there might soon be a "negative growth"?

Summary

Elicit the name for this type of table which uses pictures. Write on board "pictogram" and ask students to interpret the word in terms of prefix and suffix.

RESOURCES:

Any available pictograms in a textbook (history text).

EVALUATION:

Have students illustrate through pictogram growth trends in occupations and describe that trend in writing also.

Mathematics (Learning Disability) - Grades 10, 11
"Probability Theory and Occupations"
Donald Matos

CURRICULUM CONCEPT:

To understand the basic concepts of probability.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of the usefulness of probability theory in occupations.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational awareness	Given a list of occupations, the students will name how probability theory is used in that setting.

ACTIVITIES:

Introduction

Have students give examples of chance situations (i.e., coin flipping, betting on a horse race, buying stock, buying a used car). Elicit the meaning of the phrase 'favorable outcome'. Develop formula for probability by first considering coin flipping (i.e., what is the probability - what are the chances - of tossing heads). Ask for an intuitive response at first. Ask what is meant by a 50-50 chance. Elicit the meaning of the phrase 'possible outcomes'. Students decide on a formula - offer suggestions. (Dice may be helpful)

Tasks

1. The theory of probability is used in communications, marketing, nuclear physics, and insurance. Select one of these fields and give an example of how probability theory is an aid. (Students may use textbooks or work in groups (one group for each field).
2. Give students a set of colored wood splints (3" long). Have student work with the splints and write down all the color arrangements possible: For example: 4 colors 1. Red, orange, blue, green. 2. ....
3. Assign a job task or assignment to each color (use your imagination). For example, make believe you are an office executive. Red could mean telephone wife. Blue could mean have a meeting.
4. Compute the probability of picking a white marble from a bag of marbles. Then have students perform the action situation.

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* The curriculum concept is found in the teacher's notes.

"Probability Theory and Occupations"

RESOURCES:

Splints in at least four different colors.

EVALUATION:

Occupation	Way Probability Theory is Used
Bank Teller	
Custodian	
Secretary	
Automobile Mechanic	
Waiter	
Salesman	
Lawyer	

Mathematics (Learning Disability) - Grades 10 - 11
"Dealing With Troublesome Numbers"
Donald Matos

CURRICULUM CONCEPT:

To understand scientific notation.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of one of the ways in which technicians, scientists and other groups deal with numbers.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill competency	The student will convert large numbers and long decimals into scientific notation.
Educational awareness	The student will describe the need for scientific notation in certain science occupations.

ACTIVITIES:

Introduction

Review exponents (positive and negative) first with different bases and finally with base 10. Initiate discussion of sizes of numbers (large and small).

Tasks

1. Ask students to go to board to write large numbers and small numbers. Ask students about famous scientific numbers (i.e., Avogadro's number). How are they written? Teacher asks, "What is the advantage of writing a number in that way (i.e., number X power of 10)?"
2. What occupations find using scientific notation helpful? Have students explain how scientific notation may be useful in an occupation (i.e., the sciences).

RESOURCES:

Science text to obtain Avogadro's number, distance to planets, etc.

EVALUATION:

Have students identify an occupation in the sciences which uses scientific notation and convert into large numbers and long decimals.

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* The curriculum concept is found in teacher's notes.

Mathematics (Learning Disability) - Senior High
"Budgeting for a Family of Four"
Donald Matos

CURRICULUM CONCEPT:

To compute basic computations.*

RELATED CAREER EDUCATION CONCEPT:

To budget one's personal income.

THEMES AND OBJECTIVES:

Themes	Objectives
Economic awareness	The student will identify the essential components involved in a standard of living.
Skill competency and Economic awareness	Given an annual income and number of family members, the learner will prepare a budget that incorporates basic standards of living.
Career awareness and Economic awareness	Given various occupations, the learner will identify the social and economic benefits associated with each.

ACTIVITIES:

Day 1. Each student will imagine that he is part of a family of four. Have him consider what expenses would be incurred by a family of four (i.e., How much can they spend on food/week, putting money aside for rent, etc.).

Day 2. Visit an A&P food store. Have each student make a list of necessary items for his 'family' and a list of desired items, endeavoring always to remain within the budget decided on day 1 for a family of four.

Day 3. Distribute copies of Consumer Reports to students. Have the students work in small groups to prepare a list of necessary household items and desired items. Have class consider: Can "we" afford it.

Day 4. Have students identify an occupation and report the possible social and economic benefits of that occupation.

RESOURCES:

1. Class visits to stores in different neighborhoods to price food items and small appliances;
2. advertisements from daily newspapers; and
3. copies of Consumer Reports magazine.

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* The curriculum concept is found in teacher's notes.

"Budgeting for a Family of Four"

EVALUATION:

1. Have each student submit a family budget which includes a complete breakdown of a weekly salary: food money, rent money, insurance.
2. Give students an occupation and have them list possible social and economic benefits from that occupation.

SCIENCE - BIOLOGY

Lesson/Unit Title	Author	No. of Lessons
Scientific Careers in Biology	Harris Marmor	1
Who Studies Micro-organisms?	Harris Marmor	1
How Plant Life Affects Mankind	Harris Marmor	1
The Scientist and His Responsibilities	Harris Marmor	1
Laboratory Careers	Harris Marmor	1
The Value of Employable Skills	Harris Marmor	1
The Scientific Method	Harris Marmor	1
Working in the Laboratory	Harris Marmor	1
The Resource Center	Harris Marmor	1
Careers in Sound	Harris Marmor	1
Scientific Values	Theodora Karan Harris Marmor	1
Cultural and Scientific Evolution of Careers Through the Ages	Theodora Karan	23
Careers Related to Biology	Theodora Karan	1
Interrelatedness of Life Functions and Economic Activities	Theodora Karan	5
Classification of Plants and Animals and Related Occupations	Theodora Karan	1

Biology - Grade 9
"Scientific Careers in Biology"
Harris Marmor

CURRICULUM CONCEPT

To understand the metric system of weights and measures.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of the various scientific careers related to the field of biology.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student will identify different types of scientists in biology areas
Career Awareness	The student will describe the working conditions of scientists, given a particular career area
Attitudes and Appreciation	The student will describe reasons why we need scientists

ACTIVITIES:

Introduction

1. Have students compare the careers of a heart surgeon and an astronaut. What things do they do which are similar? How do we describe those people who work in the field of science?

2. Describe the purpose of the lesson.

Tasks

1. Have the students identify those careers which they consider to be of a scientific nature. (biologist, physicist, conservationist, dental technologist, doctor.)

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*The curriculum concept on which the lesson is based is found in the textbook: Pathways in Science, Joseph M. Oxenhorn, Globe Book Publishers New York, 1970.

2. Have the students describe the nature of each career and its value to mankind.

3. Have the student bring in articles and pictures from newspapers, magazines, etc., which are related to science.

4. Have students visit scientists or provide a guest speaker situation.

5. Have students study the working conditions of scientists; physical demands, mental demands, education, training, life style constraints, if any.

Summary

What does a heart surgeon have in common with an astronaut? Where do scientists work. How can a (pick a particular scientist) help mankind?

RESOURCES:

Newspapers, Magazines.

EVALUATION:

Ask students to list 10 different types of scientists in the biology area, describe the working conditions of those scientists, and a reason of how they are valuable to society.

Biology - Grade 9
"Who Studies Micro-organisms?"
Harris Marmor

CURRICULUM CONCEPT:

To recognize that single celled things reproduce asexually*

RELATED CAREER EDUCATION CONCEPT:

To be aware of the many types of biology related careers concerned with the life of microscopic organisms.

THEMES AND OBJECTIVES:

Themes

Career Awareness	Given a science related article, the student will identify occupations related to the field of biology.
Career Awareness	The student will identify those fields of biology concerned with the life cycle of cells and micro-organisms and describe the specialty of each.

ACTIVITIES:

Introduction

1. Have each student examine his/her article or picture for those occupations related to the biological field. The identification of these occupations will show how different fields of biology are related to cell study.

2. Discuss intent of lesson

Tasks

1. Have students identify those people who are concerned with cell and micro-organism life style. (microbiologist, virologist, biochemist, zoologist, etc.)

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*The curriculum concept on which the lesson is based if found in the textbook: Pathways in Science, Joseph M. Oxenhorn, Globe Book Publishers New York, 1970.

2. As they name a special field, have the student describe the area of concentration of each. Ex: Virologist - viruses, biochemist, biochemistry of the organism, Zoologist - classification by biological evidence, Bacteriologist - life cycle of bacteria, etc.

3. Have the students identify those fields of science related to the work done in the text so far.

4. Arrange a table with materials used by these scientists. Ex: microscope, petri dish, incubator, etc. Have the student identify each and its function.

5. Have the student prepare a list of fields outside of the hospital lab where these science specialists are employed. Ex: Industry: Pharmaceutical salesman, chemist, biologist, dental technician, optometrist, cosmetics, government, conservationist.

Summary

Review the concepts of the lesson with the students.

RESOURCES:

Required: Test, laboratory equipment, newspapers, magazines, pictures. Additional: university, . , government or industrial laboratories, film strips.

EVALUATION:

Have the student write down a list of science related careers found in an article, i.e., a biochemist, physicist, psychologist.

Have the students list those careers which are not present in the article but which are related to those fields, i.e., lab technician, research technician, X-ray technician, zoo caretaker, etc.

Have the student list those fields related to cell study, i.e., physicist, biochemist, microbiologist, virologist.

Biology - Grade 9
"How Plant Life Affects Mankind"
Harris Marmor

CURRICULUM CONCEPT:

To understand some plants reproduce by vegetative propagation.

RELATED CAREER EDUCATION CONCEPT:

To become aware that plant study affects all facets of mankind.

To recognize the tasks of a botanist

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student will identify the tasks of a botanist.
Skill Competency	The student will describe terms associated with botanical studies
Attitudes and Appreciation	The student will relate the value of plant study to living things.

ACTIVITIES:

Introduction

1. Has anyone ever taken an antibiotic? Where do some antibiotics come from? (Plants)

2. What field of science deals with plants? Today we are going to explore why the study of plants, or botany is so important to all of us.

Tasks

1. Have the student identify terms used in the field of botany, i.e., agriculture, horticulture, forms of vegetative propagation, etc.

2. Have students discuss the importance of plant study. For example:

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*The curriculum concept on which the lesson is based is found in the textbook: Pathways in Science, Joseph M. Oxenhorn, Globe Book Publishers New York, 1970.

How do plants and their products affect our every day life? Teacher display: paper, cotton, wood products, food, rubber, decorations, O_2, drugs, etc.

3. Have students discuss the effect on our lives if plants were not exploited.

4. Have the student identify those fields which work along with the botanist. Ex: Biochemist, florist, conservationist, carpenter, landscaper.

5. Have the students discuss those industries dependent on the study of plants. Ex: furniture, dye, tobacco, food, etc.

Summary

Review the tasks of the biologist with the students.

RESOURCES:

Essentials: Wood, cotton, food products, plants, tobacco, etc.
Additional: Visit from botanist and people from related industries, i.e.,florist, lumber yard employee, tree surgeon.

EVALUATION:

Have the student write a paragraph describing the work of a botanist and its value to mankind.

Have the student define: a) agriculture b) cutting c) hybrid d) grafting e) horticulture f) antibiotic

Have the student list those products of plants related to the following topics: Home, Office, Medicine, Clothes, Decoration, Transportation.

Biology - Grade 9
"The Scientist and His Responsibilities"
Harris Marmor

CURRICULUM CONCEPT:

To consider whether humans can be improved through heredity*

RELATED CAREER EDUCATION CONCEPT:

To become aware of the responsibilities of a scientist:

THEMES AND OBJECTIVES:

Themes	Objectives
	The learner will describe the scientists' responsibility to; a) himself, b) society, and c) fellow workers.

ACTIVITIES:

Introduction

1. Have the students discuss the idea of a "superior" race of people. What is the scientist's responsibility to himself, society and his fellow workers? Why must a scientist define these areas in order to enjoy his work?

Tasks

1. Have the students discuss the scientists responsibility to himself. Ex: economics, family.
2. Have the students identify how he/she is responsible to society.
3. How does one choose between an objective and subjective decision (Ex: forms of birth control, uses of nuclear energy)
4. Have the student explain how a scientist is responsible to his fellow workers. (Ex: interpersonal relationships, sharing work.)
5. Can a person enjoy his career if he fails to define these attitudes, etc.

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*The curriculum concept on which the lesson is based is found in the textbook: Pathways in Science, Joseph M. Oxenhorn, Globe Book Publishers New York, 1970.

"The Scientist and His Responsibilities"

Summary

Provide students with "what if" questions relating to a scientists task not being completed.

RESOURCES:

Supplemental: A visit from a scientist

EVALUATION:

Have each student prepare a composition defining his attitudes on the topic of "The Responsibility of a Scientist". In this have the student reflect his opinion of the scientists responsibility to himself, society, and fellow workers.

Biology - Grade 9
"Laboratory Careers"
Harris Marmor

CURRICULUM CONCEPT:*

To understand the function of the biology laboratory*

RELATED CAREER EDUCATION CONCEPT

To be aware that the biologist is aided by other supporting people in the laboratory.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student will identify those materials used by a biologist in a laboratory.
Career Awareness	The student will state those people in and out of the laboratory who support the biologist's work.
Career Awareness	The student will redefine the work of a research assistant.

ACTIVITIES:

Introduction

1. Ask students what happens to the work done in a laboratory if the supervising person is not present (i.e. no work is done, the other people do it.)

2. Have students discuss why a scientist needs supporting personnel to do tasks (i.e. to perform those skills needed in the lab, to work with the supporting personnel).

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*The curriculum concept on which the lesson is based is found in the textbook: Pathways in Science, Joseph M. Oxenhorn, Globe Book Publishers New York, 1970.

"Laboratory Careers"

Tasks

1. Arrange the laboratory with demonstrations of laboratory equipment used by the biologist, ex. glassware, microscope, chemicals, specimens, mechanical apparatus, etc. Have the students identify each demonstration and how it can be used.

2. Have the students identify those careers which support the work of the scientist, example: lab technicians, doctors, field personnel (Board of Health), secretaries, zoos, organizations, etc.

3. Have a class discussion defining the career relationships between the scientist and his supporting staff. The teacher can volunteer new information to the class as to the work of a scientist, example: theoretical work, communications with fellow scientists, government agencies and organizations administering to the progress of his supporting workers.

Summary

Review intent of lesson with students

RESOURCES:

Essential: laboratory equipment and materials.
Additional: visits by scientists or someone considered to be in a career related to, or supporting the scientists' work.

EVALUATION:

Have the student write a paragraph describing those people who support the work of the scientist. Have the student redefine a scientist and work, now that he has new information. This redefinition should include the materials, tools used by the scientist.

Biology - Grade 9

"The Value of Employable Skills"

Harris Marmor

CURRICULUM CONCEPT:

To demonstrate the dissecting of a flower*

RELATED CAREER EDUCATION CONCEPT:

To develop employable skills in occupations of a biological nature

To become aware of the various educational and training preparation requirements for certain occupations

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	The student will develop the employable skills, such as: use of microscope, scalpel, hand lense, probe, dyes.
Educational Awareness	The student will describe the value of these employable skills and make a list of those careers obtainable with a limited science background, i.e., zoo caretaker, beauty operator, photo technican nursery employee.
Educational Awareness	The student will describe how to prepare for more specialized skills.
Career Awareness	The student will list the benefits which are a result of preparing for more specialized skills.
Career Awareness	The student will describe skills and educational qualifications for specific individuals in science or related fields.

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*The curriculum concept on which the lesson is based is found in the textbook: Pathways in Science, Joseph M. Oxenhorn, Globe Book Publishers New York, 1970.

"The Value of Employable Skills"

ACTIVITIES:

Introduction

1. Show the student those materials he will be using for dissecting a flower. What use will these materials have in helping you to complete the dissection of the flower? Why is it advantageous to learn many employable skills? i.e., more specialized careers, more career opportunity, greater economic opportunities.

Tasks

1. Have student learn to use the materials the teacher has prepared for the task.

2. Have the class discuss the value of these employable skills, i.e., ability to perform more specialized tasks, i.e., zoo caretaker, beauty operator, photo technician, nursery employee.

3. Have the class discuss how they can prepare for more specialized skills, i.e., High School diploma, technical schools, 2-4 year college, graduate studies, professional school.

4. Have students list the possible benefits which are a result of preparing for more specialized skills.

    a. more career opportunities
    b. more enjoyable careers
    c. more rewarding careers
    d. careers with better financial benefits

5. Have students interview people in a science or related field. They will report to the class the educational level needed to obtain these occupational skills, i.e.,
    Ph.D. - Graduate School
    M.D. - Professional School
    Lab Tech. - Tech. School
    Phy. Ed. Teacher - College plus
    Taxidermist - H.S. Graduate
    Dry Cleaner - H.S. Graduate
    Reg. Nurse - College plus
    Engineer - College plus
    Architect - College plus

Summary

Review above exercises

"The Value of Employable Skills"

RESOURCES:

Needed: Laboratory exercise in any 9th year foundations course which teaches lab skills.

Additional: List of careers in science with education levels, SRA Occupational Education Kit (OEK), U.S. Gov-t Occupational outlook Handbook, visit by career advisor, visits by people who are in science or related careers.

EVALUATION:

The student will perform those skills needed for the discussion.

The student will make a list of those occupations available to a person with limited science background.

The student will write a paragraph about the value and benefits derived from employable skills and, how he can prepare for more specialized skills.

The student will describe the preparation needed for the following career:

a. barber
b. doctor
c. lab technician
d. gardener
e. chemist
f. dry cleaner

Biology - Grade 9
"The Scientific Method"
Harris Marmor

CURRICULUM CONCEPT:

To understand the scientific method*

RELATED CAREER EDUCATION CONCEPT (topic)

To become aware that a person in the field of science must make objective and responsible decisions.

THEMES AND OBJECTIVES:

Themes	Objectives
Decision Making Skills	The student will apply the scientific method to solve a problem assigned.
Educational Awareness	The student will describe the value of employing the scientific method in different fields of science.

ACTIVITIES:

Introduction

Give the student a simple scientific experiment to perform - i.e. How does sound change when using different tuning forks; how does the state of a liquid change with a change in temperature, etc. Have students perform the experiment assigned by the teacher.

Tasks

1. Ask "What steps did you follow while you were trying to answer the question?" - i.e., observation, experimentation.
2. Have students list three values of the scientific method - i.e. standardization, objectivity, order, practice in decision making.
3. Have students write a paragraph on the value of objective decision making in different fields of science - i.e. clarity, order, removal of subjectivity.

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*The curriculum concept on which the lesson is based is found in the textbook: Pathways in Science, Joseph M. Oxenhorn, Globe Book Publishers New York, 1970.

Summary

Review above exercises.

RESOURCES:

Materials necessary to perform a simple experiment: i.e. Several tuning fords each different in size than the other.

EVALUATION:

The student will perform the assigned experimental task. Judge product of experiment.

The student will write a paragraph about the values of objective decision making in science and related fields: i.e. - medicine, government, biologist, chemist, conservationist, teacher.

Biology - Grade 9
"Working In The Laboratory"
Harris Marmor

CURRICULUM CONCEPT:*

To understand the interrelationships which exist between fellow workers in a laboratory situation.

RELATED CAREER EDUCATION CONCEPT:

To become aware of the interrelationships which exist in a laboratory situation.

THEME AND OBJECTIVES:

Themes	Objectives
Employability Skills	The student will describe interrelationships which exist between fellow workers in a laboratory situation.

ACTIVITIES

Introduction

Today we are going to work on an experiment in groups of two's. One person will develop a method for solving the problem with the materials available and, the other person will perform the experiment and collect the data. This will help us understand the roles and interrelationships which go on in a laboratory.

Tasks

1. Prepare each lab table with those materials needed for the assigned experiment, i.e. (1) Experiment: Diffusion. Materials - iodine or Lugols' solution, starch solution, 2 flasks, animal or plastic membrane. (2) Experiment: Effect of lense on a light image. Materials - concaved and convexed lense, light source (candle), light colored background.

2. Have the students discuss the responsibilities and tasks of the role they are playing, i.e., technician, theoretician.

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*The curriculum concept on which the lesson is based is found in the textbook: Pathways in Science, Joseph M. Oxenhorn, Globe Book Publishers New York, 1970.

3. The students will perform those tasks they decide upon.
4. Have the class discuss the responsibilities, tasks and interrelationships of those people in the laboratory, i.e. Ph.D. - Theoretician, Lab Technician performs technical skills. Research Technician: Involved in experimentation.

Summary

Have the students discuss the problem when the relationships between the people did not function.

RESOURCES:

Laboratory materials to go along with the assigned laboratory tasks.

EVALUATION:

The student will write a paragraph concerning the interrelationships which exist between fellow workers in a laboratory situation.

Biology - Grade 9
"The Resource Center"
Harris Marmor

CURRICULUM CONCEPT:

To understand how to use resource materials*

RELATED CAREER EDUCATION CONCEPT:

To become aware of the use of resource materials in different fields of science

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student will describe how resource materials are used in different fields of science.
Decision-Making Skills	The students will demonstrate their ability to use resources in obtaining information.

ACTIVITIES:

Introduction

Ask students "What topic did you find most interesting this term?" Have students choose a topic they enjoyed (or, assign one). Assign a short report to each student.

Tasks

1. Have students list those resources (books, magazines, periodicals, encyclopedias, film, interview, etc.) he/she used to obtain information for his/her report.

2. Have student discuss the value of an up-to-date resource center as it relates to the student and the scientist, i.e. greater choice of materials, most recent materials are available.

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*The curriculum concept on which the lesson is based is found in the textbook: Pathways in Science, Joseph M. Oxenhorn, Globe Book Publishers New York, 1970.

3. Have students discuss those people dependent on a resource center, e.g. engineer, doctor, chemist, physicist, biologist, teacher, tradesman, etc.

4. Have student go to the library and list ten periodicals which are devoted to a specific area of science or related field, e.g. Scientific American, JAMA, The Biology Teacher, Journal of Microbiology.

Summary

Review above exercises.

RESOURCES:

Resource center or library

EVALUATION:

The student will write a short report on a topic of science which they have studied. This will be used to judge demonstrated use of resources. The student will list those resources they used to obtain information.

The student will write a paragraph which describes how resource materials are used in different fields of science.

Biology - Grade 9
"Careers In Sound"
Harris Marmor

CURRICULUM CONCEPT:

To understand how sound can be changed and controlled *

RELATED CAREER EDUCATION CONCEPT:

To become aware of careers related to sound control and production

THEMES AND OBJECTIVES

Themes	Objectives
Career Awareness and Educational Awareness	The student will list ten careers related to sound control and identify a task learned in school which could be used in that career

ACTIVITIES:

Introduction

Teacher will have a boy and a girl talk at the same volume. Ask "Do both of these students sound exactly the same? Why don't they sound the same?"
eg. Different quality, pitch.

Task
1. Give each group of students a set of tuning forks. Have students touch each of the vibrating tuning forks to different objects, i.e. desk, book, board.

2. Ask the question: "Why does each tuning fork sound differently?" eg. Size, shape. "Why do all of these objects sound differently when touched by a tuning fork?" E.g. size, shape and materials.

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*The curriculum concept on which the lesson is based is found in the textbook: Pathways in Science, Joseph M. Oxenhorn, Globe Book Publishers New York, 1970.

3. Have students list those careers involved in sound control and production. e.g. instrumental and vocal music, sound engineer, transportation, acoustics, communications industry.
4. Have students identify areas of current learnings which could be used in the occupations identified in Task 3.
5. The student will describe the value of sound control in our modern society. E.g. sound abatement in urban areas: jet, machinery, cars, recording and communications - T.V., radio, theater, recording.

Summary

Review above exercises.

RESOURCES:

Essential: Text, tuning forks for each group of students

Additional: Oscilloscope - use and demonstrations of sound testing equipment, newspapers, magazines, occupational outlook handbook.

EVALUATION:

List ten careers related to sound control and identify a task learned by you in school which could be used in that career.

Biology - Grades 9-10
"Scientific Values"
Theodora Karan
Harris Marmor

CURRICULUM CONCEPT:*

To learn the decision making responsibility of the scientifically oriented person to society's problems.

RELATED CAREER EDUCATION CONCEPT:

The student will become aware of the responsibility of a scientist as related to the betterment of society.

THEMES AND OBJECTIVES:

Themes	Objectives
Self Awareness	Given a scientific issue, the student will describe his values in relationship to that issue

ACTIVITIES:

Introduction

1. Discuss the aim of the lesson with the students. What is the decision making responsibility of the scientifically oriented person to society's problems?

2. Present to the class, as an example of a controversial approach as follows:

   a. abortion with unwanted children
   b. euthanasia for terminal patients
   c. German measles for the mother during her pregnancy

3. Ask: What social problems do you recognize as dealing with scientific responsibility?

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*The curriculum concept on which the lesson is based is found in the textbook: Pathways in Science, Joseph M. Oxenhorn, Globe Book Publishers New York, 1970.

"Scientific Values"

Tasks

(Note to reader: The writers of this lesson did not develop strategies for delivering the concepts of the lesson. They do provide a set of questions which could be used as guidelines for acitivity development. It was felt by the authors that perhaps several lessons may be generated from these questions.)

A - Amniocentesis

Discuss the pro's and cons of amniocentesis --

Examination of fluid of the growing fetus, within the mother, to check the genetic makeup.

1. How is the amniocentesis affected by the following:
   - (a) abortion
   - (b) religious, moral, and ethical values
   - (c) financial consideration
   - (d) political overtones
     ex: The dangers of a Hitler and his super-race
     (influence of philosophy of Nietzsche)

2. What are some possible birth defects?
   - (a) Down's syndrome
     non disjunction of 21st chromosome
   - (b) Intersexes (Kleinfelter's syndrome)
     XXY or XYY, etc.
     changes of sex chromosomes
   - (c) P.K.U. phenylketoneurea
   - (d) Birth defects of all types
     ex: Hemophilia
     Diabetes
     Sickle cell anemia
     Brain damage

3. What are the roles of the following scientists:
   - (a) Gynecologist
   - (b) Obstetrician
   - (c) Geneticist
   - (d) Genetic counselor

4. How should scientists deal with euthanasia?

5. What are the dangers of introducing commercial drugs, especially to pregnant mothers?
   ex: Thalidomide
   LSD

B - Population Explosion

1. What is the scientist's responsibility in relation to the population explosion?

2. How are the following areas affected:
    - (a) Food industry
    - (b) Housing
    - (c) Medical services
    - (d) Communication
    - (e) Birth control
    - (f) Pharmaceutical and plastic involvement
        ex: (Ortho & Syntex)

3. How are the following involved:
    - (a) religious overtones
    - (b) ethical and moral overtones
    - (c) political overtones

C. Ecological Responsibility

1. What ecological responsibility does man have to endangered species of flora and fauna. (plants and animals)

2. How are the following areas involved:
    - (a) Fashion industry
    - (b) Food industry
    - (c) Sanctuaries
    - (d) Voting for appropriate legislation

D. Use of Pesticides

1. What are the pros and cons of the use of pesticides on the following: (Rachael Carson - Silent Spring)
    - (a) evolution of new varieties
    - (b) upsetting the web of life
    - (c) large chemical industries
    - (d) farming and agriculture

E. Pollution

1. In what ways has pollution affected the following:
    - (a) earth
    - (b) air
    - (c) water
    - (d) noise
    - (e) large manufacturing industries
        ex: automobile and vehicle industry

F. Clear Energy

1. What impact does nuclear energy have on society?
    - (a) How is it helpful in:
        - 1) running machinery
        - 2) efficiency
        - 3) savings

        4) less pollution
        5) harnessing of the atom for practical purposes
        6) medical and scientific advances
    b) How is it harmful in:
        1) atomic wars
        2) radiation poisoning and burns
        3) its affect on future generations;
           on flora and fauna

EVALUATION:

For each of the following topics the student will write a paragraph defining his/her values in relation to:

- a) amniocentesis
- b) population explosion
- c) ecological responsibility
- d) use of pesticides
- e) pollution
- f) nuclear energy

Biology - Grade 10
"Cultural and Scientific Evolution of Careers Through the Ages"
Theodora Karan

CURRICULUM CONCEPT*

To recognize how an investigation of science through the ages reveals scientific advances that have led to modern discoveries.

To inter-relate chronological history, geographical location, art, drama, physio- and psychotherapy, religion, magic, singing, and drug lore, given illustrations and information of science through the ages.

RELATED CAREER EDUCATION CONCEPT:

To compare the inter-relationships of the roles of scientists and related occupations in society from 1500 B.C. - 1500 A.D. as well as from 1500 A.D. to the present period.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness and Educational Awareness	Given a particular period of history, the student will describe the way in which occupations relate to needs and functions in that society.

UNIT RATIONALE:

There would have been fewer,less significant historical developments without scientific developments. This is also true for literature, music, art, social studies, and numerous fields. An interdevelopment of cultures and influences have led to our present day needs. Thus, we must apply everything from the past ages, present, and future projections to our everyday life. It is important to note that science, as well as all other fields, has career implications for the youngster.

FORMAT OF REMAINING MATERIALS:

The following material is composed of twenty-three periods of history which are briefly introduced through a cultural and scientific evolution perspective. Subsequent to the introductory statement is a list of questions which the teacher may use as a guide for generating further investigation into that period of time.

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*The curriculum concept on which the lesson is based is found in the teacher's notes.

"Cultural and Scientific Evolution of Careers Through the Ages"

No strategies for delivering the concepts are suggested. Therefore, the teacher will need to spend time selecting the appropriate activities and assessment instrumentation for bringing about effective learning on the part of the students.

In order to foster an interdisciplinary approach to learning, a list of supplemental ideas which could be taught during the same instructional time span are included. These were prepared in conjunction with area curriculum consultants.

1500 - 1400 B.C. - Eygpt:

Introductory Statement

Between 1500 - 1400 B.C. in Eygpt, the physician was given dignity and status. He is pictured clothed in clean white linen and a wig. Directions and treatment appear on a scroll held by his assistant. Lockjaw was described in an ancient scroll now known as the Edwin Smith papyrus. Prescribed magic-religious rites were observed by specially trained priests. Between 4000 - 332 B.C., pharaohs lived not as kings, but as gods, and forced their people to create a long term civilization. Medicine occupied a dominant position in the ancient world for 2500 years.

Questions to be Considered

1. In Eygptian time, what were the roles of the following:
   a. physicians
   b. assistant to physician
   c. priests
   d. pharoahs
   e. kings
   f. gods
   g. medical men in various fields.
2. What in his culture molded his role?
3. Are these positions current in our society?
4. If these positions still exist, how have they changed?

Supplemental Ideas by Related Disciplines

1. Math: Structure of Pyramids
   a. used geometry for practical problems
   b. measured land surfaces
   c. restored lost land marks when the Nile overflowed
2. Literature: Anthony and Cleopatra: Shakespeare
   Caesar and Cleopatra: Shaw
3. Music: Aida: Verdi
   Oratorio:
   a. Israel in Egypt: Handel
   b. Let My People Go: Negro spiritual
4. Art: Encaustic (wax and color combination), one of the most permanent and enduring medias ever used. See mummy case portraits at the Metropolitan Museum of Art.

"Cultural and Scientific Evolution of Careers Through the Ages"

3000 B.C. - 2000 B.C. - Babylonia, Mesopotamia:

Introductory Statement

About 3000 B.C., in Babylonia, Mesopotamia, Clay tablets documented the practice of medicine.

About 2000 B.C., the Code of Hammurabi was strictly enforced. About 4000 B.C. years ago the interacting drama of law and medicine included a cast of the King, the scribe, court attaches, guards, priests, friends of the plaintiff, and the defendent.

Questions to be Considered

1. In Babylonian time, what were the roles of the following:
   a. medical man or physician
   b. lawyer
   c. king
   d. scribe
   e. court attaches
   f. guards
   g. priests
   h. friends of the plaintiff
   i. defendent
2. What in his culture molded his role?
3. Are these positions current in our society?
4. If these positions still exist, how have they changed?
5. Discuss the role of the artist sculptor who produced the clay tablets.
6. Define the Code of Hammurabi.
7. How did the court, lawyer, and doctor involve the Code of Hammurabi?

Supplemental Ideas by Related Discipline

1. Art: "Small" stone carvings - Sumer people (Sumerian King). They had little access to stone and therefore had to work in wood which perished, or small stone carvings, and precious metals.

First Century Peru:

Introductory Statement

Before the Christian era, at the sunswept Pacific coastline of Pacacca peninsula, Peru, first century surgeons used the trepanning operations which was a way of opening the skulls of living patients. This was accomplished with the aid of knives of glass - hard absidian, a crude plant narcotic, cotton and bandages. The priest used incantations to involve supernatural intervention.

Questions to be Answered

1. In Peru, before the Christian era, what were the roles of the following:
   a. surgeon
   b. priest
   c. knife or tool maker shaping glass hard absidian
   d. early "geologist" who obtained glass hard absidian

  e. early botanist or farmer, growing narcotic plant
  f. early chemist extracting crude narcotic from plant
  g. early farmer growing cotton plants
  h. How was cotton prepared for making bandages?
  i. How might the surgical supplier package and distribute the bandages?

2. What in his culture molded his role?
3. Are these positions current in our society?
4. If these positions still exist, how have they changed?
5. Are trepanning operations still popular today?
6. How is modern surgery accomplished?
7. Name some instruments used in modern surgery.
8. How was the supernatural part of the priests used in religion?
9. How might incantations be related to music?
10. Compare early incantations with Judeo-Christian chants.

Supplemental Ideas by Related Disciplines

1. Literature: Royal Hunt of the Sun: Peter Shaffer (Cortez and Montezuma and Inca's)
   Inca Art and Gold
2. Music: Folk music (Brazil - Villa Lobos)
3. Dance: Religious
4. Art: a. Mainly ceremonial and highly abstract or styalized
   b. Use of earth color paints
5. Drug lore: Incas, Mayans, Aztecs, and Southwest United States Indians tribes have their religions based in altered states of consciousness.
   a. Journey to Ixtalan: Carlos Castaneda: Castaneda met an Indian sorcerer, Don Juan, who taught him how to use (peyote) mescaline to reach an altered state of consciousness in which he could perceive reality from a different perspective. Don Juan used this as part of his religion. After learning this method by using mescaline, the sorcerer learns to reach the altered state without any drugs at all.
   b. The Sorcereror's Apprentice:Carlos Caneda

2000 Years Ago - American Indian

Introductory Statement

The American Navajo Indians, dating back to pre-Christian time, about 2000 years, have given us many examples of primitive medicine. Sandpainting ceremonies used physio- and psychotherapy, religion, magic, singing and drug lore. The medicine "hogan" houses family and friends who join in the mountain chants in which the sandpainting has an important part. The medicine man sings, prays, and manipulates magico-religious artifacts. The singer and spectators share his primitive health seeking herb preparations.

Questions to be Answered

1. In the American Navajo Indian culture what were the roles of the following:
   a. medicine man
   b. family
   c. spectators
2. What in his culture molded his role?

3. Are these positions current in our society?
4. How has the family life style of the American Navajo Indian changed to meet present American democratic society?
5. How did the medicine man use the following:
   a. physio- and psychotherapy
   b. magico-religious artifacts
   c. mountain chants and singing
   d. herb preparation and drug lore
6. How were these people in search of health giving measures?
7. What type of primitive art was involved with sandpainting stressing design, form, color, and interpretation of ceremonies?
8. What other tribes of Indians are found in various parts of America? Compare their life styles to the Navajo's.
9. How did Columbus' discovery of America in 1492 change the life style of the American Indians?
10. How did the early settlers change the life style of the American Indian?
11. Describe the life style and occupations of the early settlers.
12. How have the life styles and occupations of Americans changed from the early days?
13. What are some old world influences that have contributed to our American culture and occupations?

Supplemental Ideas by Related Disciplines

1. Math: Symbols in sandpainting
2. Literature: a. Last of the Mohicans: James Fenimore Cooper
   b. The Light in the Forest
   c. Play - Unto these Hills: Paul Green
3. Music: a. Buffie Ste. Marie (Sioux)
   b. Crazy Horse Symphony, John Mill
   c. Folkway Records on American Indians (Hopi)
   d. Chief Thundercloud (children), Edward Grant
4. Art: a. Highly ceremonial: Sandpainting (only Southwest Indians) two dimensional
   b. Totem art - three dimensional (see Brooklyn Museum collection)
5. Dance: Music had a religious function.

100 B.C. - 800 A.D. - Greece

Introductory Statement

In Greece, between 500 B.C. - 500 A.D., Hippocrates, the "Father of Medicine," in his display of the art of healing showed kindliness, concern, and love for mankind. His name represents the beauty, value, and dignity of medicine for all times. About 640(?) - 546 B.C., Thales, a Greek philosopher. was the first ancient thinker who applied scientific rather than mythological interpretations to the study of natural phenomena. He believed that all life originated in and arose out of water.

About 384 - 322 B.C., Aristotle, a Greek naturalist, collected and organized all the known zoological facts of his period. He made the first serious attempt to classify animals on the basis of their anatomy probably from first hand dissections.

"Cultural and Scientific Evolution of Careers Through the Ages"

Between 500 B.C. - 500 A.D., more than 200 Grecian temples of Asclepius existed, where for nearly a thousand years every night, the sick and afflicted pilgrims flocked. They took part in a ritual called incubation, in which the ancient, kindly god of medicine was expected to visit them during a dream-state and either heal them or prescribe drugs, diet and modes of treatment. They were required to be clean and "think pure thoughts." Recipients of Asclepius' favor, to show appreciation, caused votives, which were stone or terra cotta images of afflicted parts which supposedly had been healed to be made and suitably inscribed. They were then presented and hung as testimony on the temple walls.

Between 800 B.C. - 100 B.C., Greek Democracy produced great philosophers, great soldiers, and architects, which have been copied for 2000 years. However, it could not keep the great democracy it had produced.

Questions to be Considered

1. In Greece, 800 B.C. - 500 A.D., what were the roles of the following:
   a. doctor
   b. philosopher
   c. naturalist
   d. soldiers
   e. architects
   f. zoologist
   g. anatomist
   h. pharmacologist
   i. dietician
   j. psychologist and psychiatrist
   k. sculptor and artist
2. What in his culture molded his role?
3. Is this position current in our society?
4. If the position is still there, how has it changed?
5. Why was Hippocrates called the "Father of Medicine?"
6. How is healing considered an art?
7. How was Thales both a philosopher and scientist?
8. How did Thales substitute scientific rather than mythological interpretations to the study of natural phenomena?
9. How does our present theory of evolution compare to Thales' belief that all life originated in and arose out of water?
10. How does Aristotle's classification of animals and zoological facts compare with our present day method of classification and taxonomy?
11. How did Aristotle study anatomy from dissections?
12. What was the function of the Grecian temples of Asclepius?
13. In what type of incubation ritual did the sick and afflicted pilgrims take part?
14. How were drugs and diet stressed in these rituals?
15. How were clean minds and bodies stressed?
16. How were votives, the stone or terra cotta images, fashioned and displayed?
17. What type of architecture was prominent in this time?
18. Compare this early army to the present day Greek army.
19. What type of democracy existed in early Greek time?
20. Why did not this early democracy endure?
21. Compare early Greek democracy with our present day American democracy.

"Cultural and Scientific Evolution of Careers Through the Ages"

Supplemental Ideas by Related Discipline

1. Math: In 600 B.C., first sought: explanations from geometrical facts and relationships among facts, and logical systems.
    a. Pythagorus
    b. Plato
    c. Aristotle
    d. Euclid - devised the geometric system we use in teaching geometry
2. Literature: a. *Iliad* and the *Odyssey*: Homer
    b. *Dialogues of Plato*, *The Republic*: Plato
    c. Writings of Hippocrates, (Hippocratic Oath)
    d. Writings and plays by:
        1. Aeschylus
        2. Sophocles
        3. Aristotle: Aristotalian logic
        4. Euripedes
3. Art: Classical proportions, use of geometric math and anatomy, good distribution of media, carvings, murals, wall paintings, pottery. Foundations of all Western art.
4. Music: Invented the musical scales which are based on vibrations
    Folkway Records: Themes from *Zorba the Greek* and *Never on Sunday*.
5. Dance: Folk dancing: This is a male rather than a female oriented form. Form of self expression.

2000 Years Ago - India

Introductory Statement

More than 2000 years ago in India, plastic surgery was practiced. In the ancient Indian text, Súsruta -sanchita, can be found details of Súsruta's procedure and surgical instruments. The patient was drugged with wine, and was steadied by friends and relatives as the great Hindu surgeon began an otoplastic operation, fashioning an artificial ear lobe. He used a section of flesh cut from the patient's cheek, attached it to the stump of the mutilated organ, then treated him with hemostatic powders, and bandaged the patient.

Questions to be Considered

1. In India, what was the role of the following:
    a. plastic surgeon
    b. surgical instrument maker
    c. bandage maker
    d. drug dispenser and wine industry
    e. sedatives and friends
    f. sculptor - artist
    g. publisher
    h. writer
    i. bookbinder
    j. publishing house
    k. paper manufacture
2. What in his culture molded his role?
3. If this position is still current in our society, how has it changed?
4. How did the Hindu religion play a part in the life style of this society?
5. How did the sculptor artist fashion an artificial earlobe?
6. How was the cheek flesh attached to the mutilated earlobe stump?

7. How does this plastic surgery operation compare with modern transplants?
8. Why is it important that there was a written text, Súsruta-sanchita, to describe procedure and surgical instruments? How does the paper in the text compare with Egyptian scrolls and clay tablets?
9. How were hemostatic powders used? Compare this with modern day antiseptics and antibiotics.
10. How did the early bandages compare with our modern day bandages?
11. How does the use of wine compare with our modern day anesthetics?
12. How is agriculture involved in the making of wine?

Supplemental Ideas by Related Disciplines

1. Literature: a. *Siddhartha*: Herman Hesse
   b. *Passage to India*: E. M. Foster
2. Music: Ravi Shankar, classics and modern
3. Art: Architectural: costume decorations, religious themes and symbolism, very rich brilliant colorations
4. Dance: Very important religious form. All gestures have meaning.

800 B.C. - 300 A.D. - Roman Empire

Introductory Statement

During 130 - 200 A.D., there was a tremendous Greek influence on the Roman Empire. Galen was a shrewd observer who gained much experience through experimentation. He advocated cupping as a treatment. Fom his formulas "galenicals," pharmacy as well as medicine benefited. For 1500 years Galen's teachings were accepted as dogma by both teachers and practitioners and traveled widely. He lectured widely, wrote prolifically and was a physician to emperors as well as commoners in the Roman Empire.

During 800 B.C. - 300 A.D. these practical people assimilated Greek and Egyptian culture to fill their own needs, and they brought ancient civilization to a climax.

Questions to be Considered

1. In the Roman Empire what was the role of the following:
   a. physician
   b. pharmacist
   c. teacher and lecturer
   d. writer of scientific material
   e. emperor
   f. commoners and practical people
   g. book writer
   h. publisher
   i. bookbinder
   j. paper manufacturer
2. What in his culture molded his role?
3. If this position is current in our society, how has it changed?
4. How did the Romans assimilate Greek and Egyptian culture to fit their own needs?
5. Galen traveled extensively. By what means of transportation might this have been accomplished?
6. How did Galen use observation and experimentation in his medical teachings?
7. Is the ancient practice of cupping advocated by Galen still used today?
8. How did Galen's formulas "galenicals" affect pharmacy and medicine?

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Supplemental Ideas by Related Disciplines

1. Math: Roman numerals, sun dials
2. Literature: Plays of Plautus
3. Art: Expansion of Greek art.
   Portrait statuary - great heroes

865 - 925 A.D. - Arabic Persia

Introductory Statement

During 865 - 925 A.D., in Arabic Persia, Rhazes and Avicenna flourished as leaders in Arabic medicine. Rhazes with his keen observations and inventiveness, was the first to describe measles and smallpox; to observe pupillary reaction to light; to use mercurial purgatives, and to publish a text on children's diseases.

For the preservation of ancient Greco-Roman knowledge during the Middle Ages, and for improving it, the West is deeply indebted to Medieval Arabs. From the East came many medical advances, our numerical system and many words, such as alcohol.

Questions to be Considered

1. In Persia what was the role of the following:
   a. physician
   b. mathematician
   c. linguist and philologist
   d. pharmacist and/or chemist
   e. publisher
   f. bookbinder
   g. paper manufacturer
2. What in his culture molded his role?
3. If this position is current in our society, how has it changed?
4. What was Rhazes and Avicenna's leadership in Arabic medicine?
5. How did Rhazes use his keen observations and inventiveness in describing the following:
   a. measles
   b. smallpox
   c. pupillary reaction to light
6. How is observation and inventiveness related to:
   a. deductive reasoning
   b. the scientific method
7. Why is it important that Rhazes published a text on children's diseases?
8. During the Middle Ages, the Arabs preserved and improved Greco-Roman knowledge. Why is this important?
9. From where did our numerical system, and words, such as alcohol come?

Supplemental Ideas by Related Disciplines

1. Math: Arabic numerals
2. Literature: a. Ali Baba and the Forty Thieves
   b. Tales of the Arabian Nights
   c. Autobiography of Lawrence of Arabia
3. Art: Illuminations, manuscript (Persian), colors brilliant, crafts carpentry and exotic weaving, precious metal work.

"Cultural and Scientific Evolution of Careers Through the Ages"

Medieval 15th Century - France:

Introductory Statement

An example of a 15th century medieval hospital exists in France. Carefully preserving the atmosphere of the 15th century is the Hotel Dieu of Beaune, France, founded in 1443. This is the world's oldest edifice to have been in continuous use as a hospital.

At the end of the room is a small chapel. Garbed in habits traditional to their ancient order, are the sisters of the Congregation of Saint Martha, who have cared for the sick, the aged, and the indigent in this hospital for more than five hundred years uninterrupted by wars, by economic upheavals, or by political changes.

Questions to be Considered

1. In the medieval time, what was the role of the following:
   a. physician
   b. nun
   c. the sick, aged, and indigent
   d. the designer of the nun's habit
   e. the maker of the cloth for the nun's habit
   f. the architect of the Great Room of the Poor
2. What in his or her culture molded his or her role?
3. If this position is current in our society, how has it changed?
4. How has the architectural design of the medieval hospital changed to meet the needs of our modern hospitals?
5. How has the role of the nun changed to meet our present day needs?
6. What changes have taken place in the design and fabric of the nun's habits through history?
7. What role did the Church play in caring for the sick?
8. Compare the care of the sick, aged, and the indigent between medieval time and today.

Supplemental Ideas by Related Disciplines

1. Math: Pentagrams
2. Literature: Canterbury Tales: Chaucer
   Once and Future King: T. H. White
   Idylls of a King: Alfred Lord Tennyson
   Plays:
     Camelot: Lerner and Lowe
     Elizabethan plays: Shakespeare
       Macbeth
       Hamlet — Witchcraft and occult and alchemy
       Romeo and Juliet
3. Art: Tapestry and Architecture: Gothic
   Precious manuscript lettering: caligraphy

Renaissance 16th Century - Swiss:

Introductory Statement

During the Renaissance, the Swiss born Paracelsus, whose name was Theophrastus Bombastus von Hohenheim, between 1493 - 1541 brewed many things in his chemical kitchens. He advocated the use of chemicals in medicine. He attempted to manufacture new remedies and mix polypharmacals. He attacked medieval "sacred cows", Galen and Avicenna, medical colleagues, religionists and political officials in a vitriolic and abusive way. His medical writings were extensive.

"Cultural and Scientific Evolution of Careers Through the Ages"

Questions to be Considered

1. During the Renaissance, what was the role of the following:
   a. medical man
   b. "Chemical kitchen" or research laboratory
   c. chemist
   d. pharmacist
   e. manufacturer of new remedies
   f. religionist
   g. political official
   h. publisher
   i. writer
   j. bookbinder
   k. paper manufacturer
2. What in his culture molded his role?
3. If this position is current in our society, how has it changed?
4. Although patients liked Paracelsus, why did his controversies force him to travel widely?
5. What means of transportation might he have taken to do his traveling? What occupations were involved in traveling?
6. How does the manufacture of remedies and polypharmacals compare with our modern manufacturing industry?
7. How does a "chemical kitchen" compare with our modern chemical laboratory?
8. Where might medicine have remained if he had not attacked the writings of Galen and Avicenna?
9. Why is it important that Paracelsus did extensive medical writing?
10. What effect might his attacks have had on:
    a. religionists
    b. political officials

Supplemental Ideas by Related Disciplines

1. Math: Decartes: analytic geometry, cartesian mathematician
   Newton: invented calculus
2. Literature: Writings of Voltaire
   Restoration plays of England - example: Sheridan, Restoraand Renaissance
3. Music: Purcell, Montiverdi, Palastrina
4. Art: Birth of creative individuality as distinct from medieval
5. Dance: Social

Renaissance 16th Century - Brussels, Belgium:

Introductory Statement

During the 16th century, Andreas Vesalius of Brussels, Professor of Surgery and of Anatomy at the University of Padua, became the first great teacher of anatomy from natural observation. He conducted many anatomical demonstrations on human bodies, which were attended by medical students, physicians, interested civic officials, sculptors, and artists. He was the first to break with Galen's 1400 year old anatomical texts. He published Tabulae Anatomicae Sex in 1538, and the monumental De Humani Corporis Fabrica. These valid works, although ridiculed by Galenists, became classics in medical literature.

"Cultural and Scientific Evolution of Careers Through the Ages"

Questions to be Considered

1. During the 16th century, as shown in Andreas Vesalius' circle, what was the role of the following:
    a. anatomy teacher
    b. physician
    c. civic officials
    d. sculptor
    e. artist
    f. publisher
2. What in his culture molded his role?
3. If this position is current in our society, how has it changed?
4. Why was it so important that Vesalius used human bodies for his natural observations and demonstrations?
5. Why is Vesalius' break with Galen's approach to anatomy so important?
6. What influence did Vesalius' anatomical approach have on the following:
    a. sculptor
    b. artist
    c. civic official

Supplemental Ideas by Related Disciplines

None provided

Renaissance - 16th Century - France:

Introductory Statement

During the 16th century Ambroise Pare, while a young French army surgeon, had his first experience treating for arguetris wounds. When he ran out of boiling oil (traditional for treatment of gunshot injuries) he improvised, and discovered that unburned patients healed much better. Many soldiers and citizens benefited from his rule not to use oil again. In 1552 Pare discontinued the use of cautery irons used to stop bleeding, and reintroduced ligature for tying blood vessels. He was practical, inventive, observant, and compassionate. He served as surgeon to four French kings and earned the title of "Father of Surgery."

Questions to be Considered

1. In 16th century France what was the role of the following:
    a. army surgeon
    b. soldiers
    c. citizens
    d. kings
2. What in his culture molded his role?
3. If this position is current in our society how has it changed?
4. What was the traditional way for treating gunshot injuries?
5. Why was it fortunate that Pare ran out of boiling oil?
6. In the light of better healing results without boiling oil, what rule did Pare substitute for another?
7. To stop bleeding why did he reintroduce ligatures for tying blood vessels instead of using cautery irons?
8. How are the following used today:
    a. ligatures
    b. cautery
9. How did his qualities of being practical, inventive, observant, and compassionate qualify him for being a good surgeon?
10. What was Pare's role as surgeon in treating kings?

"Cultural and Scientific Evolution of Careers Through the Ages"

Supplemental Ideas by Related Disciplines

1. Music: Songs of the Anvergne, Victoria de Los Angeles
   Berloiz, Bizet, Debussey, Franck, Loillet (Chamber music), Ravel
2. Art: Birth of Baroque, Peter Lorraine
3. Dance: Ballet form born in French courts

Renaissance 17th Century - England:

Introductory Statement

During the 17th century, the London physician, Thomas Lydenham posthumously earned the titles as the "English Hippocrates," and the "Father of Clinical Medicine" in Britain. He believed that the bedside of a patient was the only place where doctors could learn about disease. His observations were honest and straightforward, and accepted, and published in many countries. Lydenham's plain Puritan costume markedly contrasted with the high fashion raiment worn by his lifelong friend, John Locke, physician-philosopher, who frequently accompanied him on his rounds of patients.

Questions to be Considered

1. In London, during the 17th century what was the role of the following:
   a. physician
   b. philosopher
   c. patient
   d. publisher
   e. translator who puts observations into foreign languages
   f. costume designer of plain Puritan and high fashion clothing
2. What in his culture molded his role?
3. If this position is current in our society how has it changed?
4. Why was Thomas Lydenham posthumously given the titles of the "English Hippocrates" and "Father of Clinical Medicine?"
5. Why did he believe that the bedside of a patient was the best place to learn medicine?
6. How were his straightforward and honest observations part of the scientific approach?
7. Why was it important that his observations were published in other countries and obviously in other languages?
8. Explain the contrast between the garments worn by Lydenham and Locke.

Supplemental Ideas by Related Disciplines

1. Literature: London: see Shakespeare, Diary of Pepys, Writings of Alexander Pope
2. Music: Prokeofieff, Tchaikovsky (Romeo and Juliet), Berlioz, Gounod,
3. Art: English Rennaissance; Holbein tradition

Early 19th Century - France:

Introductory Statement

In France, during the 19th century, Theophile Laennec, while at Necker Hospital, Paris, in 1816 devised the "stethoscope," a foot-long hollow wooden cylinder for listening to sounds in patients' chests. He compared opinions formed during stethoscopic examinations with later findings at autopsy, and then learned to accurately diagnose pathologic heart and lung conditions, and to better understand many chest and pulmonary diseases, especially tuberculosis, which ended his own life. One of the great contributions to 19th century medicine were his instruments and published reports.

"Cultural and Scientific Evolution of Careers Through the Ages"

Questions to be Considered

1. During the 19th century what was the role of the following:
   a. physician
   b. patient
   c. instrument or stethoscope maker
   d. wood manufacturer
   e. publisher of reports
2. What in his culture molded his role?
3. If this position is current in our society, how has it changed?
4. What did Laennec's stethoscope look like?
5. Of what material was the first stethoscope made?
6. How does the first stethoscope compare with our present day stethoscope?
7. a. How did he compare opinions formed during stethoscope examinations with autopsy findings?
   b. How does this compare with the collection and interpretations of data when using the scientific method?
8. How does his learning to accurately diagnose and understand diseases compare with the application of steps in the scientific method?
9. a. List the following diseases:
      pathological heart
      pathological lung
   b. Not only have scientists written books on medicine, but Laennec wrote reports. Why is this significant?

Supplemental Ideas by Related Disciplines

Art: Seeds of modern art, end of aristocratic court art, transition period.

Middle 19th Century - Georgia:

Introductory Statement

During the 19th century, American medical men set out to conquer pain. A Georgia physician, Crawford W. Long, in 1842, used ether for anesthesia, and a Connecticut dentist, Horace Wells, in 1845 tried unsuccessfully to demonstrate anesthesia with nitrous oxide. At Massachusetts General Hospital, William J. G. Morton, a Boston dentist, in 1846, gave painless operations to mankind, which was widely used within the year.

Questions to be Considered

1. In 19th century America what were the roles of the following:
   a. medical men
   b. dentist
   c. anesthetist
2. What in his culture molded his role?
3. Are these positions current in our society?
4. If these positions still exist how have they changed?
5. Why is it fortunate that operations were made painless?
6. How is ether a better anesthetic than nitrous oxide?
7. How long did it take for the ether anesthetic method to be used?
8. Where did the following men do their work:
   a. Crawford W. Long
   b. Horace Wells
   c. William J. G. Morton

"Cultural and Scientific Evolution of Careers Through the Ages"

Supplemental Ideas by Related Disciplines

1. Literature: 19th and 20th century witchcraft: The Scarlet Letter: Hawthorne, The Crucible: Arthur Miller
   Walden: Thoreau (going back to nature)
   Books on Ann Hutchinson in Connecticut
2. Art: Protestant ideal negated visual expression

Middle 19th Century - Pennsylvania:

Introductory Statement

During the middle of the 19th century, in 1847, 250 delegates organized the American Medical Association. This took place among exhibit cases and before ancient bones of a mastadon, Mammut americanum, in the Hall of the Academy of Natural Sciences of Philadelphia, Pennsylvania. Their aims were: the advancement of medical knowledge, improved medical education, launching of a program of medical ethics, and furtherance of public service. Dr. Nathaniel Chapman was the first president. A list of distinguished doctors became presidents, chairmen of the committees, committeemen, secretaries, and treasurers.

Questions to be Considered

1. During the middle of the 19th century, in 1847, what were the roles of the following officers of the first American Medical Association:
   a. president
   b. vice president
   c. chairman of a committee
   d. committeemen
   e. secretaries
   f. treasurers
   g. members
2. What in his culture molded his role?
3. Are these positions current in our society?
4. If these positions still exist, how have they changed?
5. How many delegates organized the A.M.A.?
6. Where was the A.M.A. organized?
7. Why was the Hall of the Academy of Natural Sciences an appropriate place for this original A.M.A. organization?

Supplemental Ideas by Related Disciplines

1. Literature: Autobiography of Benjamin Franklin (invented bifocal glasses)
   Poor Richard's Almanac
2. Art: Limited decorative arts

Middle 19th Century - Germany:

Introductory Statement

Also during the middle of the 19th century, in 1850, Hermann Ludwig Ferdinand von Helmholtz, professor of physiology at Konigsberg, invented the ophthalmoscope, an instrument used for the inspection of the interior of the eye. He was a physician by training, teacher by profession, and Germany's foremost physicist. He contributed to medicine, acoustics, and physiologic optics. He enjoyed eminence, distinction, and world wide recognition.

"Cultural and Scientific Evolution of Careers Through the Ages"

Questions to be Considered

1. During the middle of the 19th century, in 1850, in Germany, for von Helmholtz, what in his culture molded his role as:
   a. physician
   b. teacher
   c. physicist
   d. physiologist
   e. acoutician
   f. optician
2. Are these positions current in our society?
3. If these positions still exist, how have they changed?
4. What is the use of the ophthalmoscope?
5. In science, what do we mean by an instrument or tool?
6. How did the world recognize this man?

Supplemental Ideas by Related Disciplines

1. Literature:	Freud's writings, Jung, Nietzche
2. Music:	Bach, Beethoven, Brahms, Schubert, Schumann, Wagner
3. Art:	End of court art and seeds of expressionism
4. Dance:	Folk, social (Influence of Strauss' waltzes)

Middle 19th Century - Alabama:

Introductory Statement

Also, during the middle of the 19th century, in 1845, James Marion Sims, M.D., in his crude Montgomery, Alabama hospital, examined a slave girl, Lucy, and launched an international career as a gynecologic surgeon. He raised gynecological surgery from an unknown to a respected medical specialty. In 1855, he established the first Woman's Hospital in New York. He served as president of the American Medical Association, 1875-1876, and became a leader in the United States, and Europe where he was honored by many nations.

Questions to be Considered

1. During the middle of the 19th century, in 1845, in Montgomery, Alabama, for Sims, what in his culture molded his role as:
   a. physician
   b. gynecologic surgeon
   c. president of the American Medical Association
2. Are these positions current in our society?
3. If these positions still exist, how have they changed?
4. How did his examination of a slave girl launch a whole new career?
5. How did he raise gynecological surgery from an unknown to a medical specialty?
6. Where did he establish his first woman' hospital?
7. Why did Europe as well as the United States honor this man?

Supplemental Ideas by Related Disciplines

None provided.

"Cultural and Scientific Evolution of Careers Through the Ages"

Middle 19th Century - France:

Introductory Statement

Again, during the middle of the 19th century, Claude Bernard of Saint-Julien (Rhone), France, felt more at home at his provincial farm than he did in experimental laboratories. At this farmhouse he wrote his great book, An Introduction to the Study of Experimental Medicine, while he recuperated from recurrent attacks of illness. He was greatly skilled in observation and dissection, and gave outstanding physiologic discoveries on pancreatic secretions, animal sugar, and vasomotor nerves. He held professorships in physiology at leading Paris schools, and was awarded national and international scientific honors.

Questions to be Considered

1. During the middle of the 19th century, in France, for Claude Bernard, what in his culture molded his role as:
   a. physician
   b. physiologist
   c. laboratory experimentor
   d. professor
   e. writer
2. Are these positions current in our society?
3. If these positions still exist, how have they changed?
4. Why did he feel more at home in his farmhouse?
5. Why is it important that he was greatly skilled in observation and dissection?

Supplemental Ideas by Related Disciplines

1. Literature: Voltaire, biography of Madame Curie (Eve Curie)
2. Art: Transition, end of court art
3. Drug lore: In Romantic and Victorian era, poets were reknowned for use of opium and the people often used laudanum (opiate) as a tranquilizer

Late 19th Century - Civil War, United States:

Introductory Statement

During the Civil War, about 1864, over a half million lives were lost. Disease was widespread. Scurvy was common and turnips (containing vitamin C), which could prevent it, cost several hundred dollars a piece. An opeation completely lacked sanitary precautions. Surgeons wore no gowns or masks and visitors were often allowed to watch the operation. It was not necessary to wash the hands before operating.

Joseph Lister working in England using Pasteur's discovery of airborne organisms causing disease, reasoned that by killing these organisms, infection would be prevented. His technique of antiseptic surgery was developed too late to save Civil War lives, but has since saved numerous lives. Today we use aseptic surgery.

Questions to be Considered

1. During the 19th century, about 1864, for Lister in England, what in his culture molded his role as:
   a. physician
   b. surgeon
   c. developer of antiseptic surgery

2. Are these positions current in our society?
3. If these positions still exist, how have they changed?
4. How was he influenced by Pasteur's discovery of airborne disease causing organisms?
5. What impact would Lister's discovery have had on the lives lost in the Civil War?
6. Why is it important that sanitary conditions exist during an operation?
7. What is Lister's technique of antiseptic surgery?
8. What is aseptic surgery?

Supplemental Ideas by Related Disciplines

1. Literature:
   a. Biography of Lincoln (Carl Sandburg)
   b. Civil War trilogy (Bruce Caton)
   c. The Day Lincoln Was Shot (Jim Bishop - deals with wound)
   d. Mary Todd Lincoln, Her Life in Letters, Ed Turner
   e. Mourning Becomes Electra (Eugene O'Neill)
   f. Biography of Louis Pasteur, Walter Reed
2. Art: First important documentary, application of photography
3. Dance: Folk dancing, square dancing, Southern United States (Cakewalk, Promenade), Social balls with waltzing and formal dancing

End 19th Century - Maryland:

Introductory Statement

At the end of the 19th century, in 1893, the Johns Hopkins University School of Medicine, opened in Baltimore, Maryland. The school and hospital emphasized research, high admission standards, and was innovative in medical training. These advanced teaching methods influenced a medical education revolution, led to higher requirements for medical licensure, brought about the closing of many substandard medical schools and helped raise the status of medicine in the United States to a position of leadership.

Questions to be Considered

1. At the end of the 19th century, what in our culture molded the formation of the Johns Hopkins University School of Medicine?
2. Where did this take place?
3. Why is it important that the school and hospital emphasized the following:
   a. research
   b. high admission standards
   c. innovation in medical training
4. Why is this advanced medical teaching considered a medical educational revolution?
5. How did this lead to the following:
   a. higher requirements for medical licensure
   b. closing of substandard medical schools
   c. raising of the status of medicine
6. How did the United States attain a position of leadership in medicine?

Supplemental Ideas by Related Discipline

L. Literature: Clara Barton and the Founding of the Red Cross
Florence Nightengale

"Cultural and Scientific Evolution of Careers Through the Ages"

End of 19th Century - Germany:

Introductory Statement

Also at the end of the 19th century, Wilhelm Conrad Röntgen, Professor of Physics and Rector of the University of Würzburg, publicly demonstrated his newly discovered X-rays. He took an X-ray photograph of the hand of the famed Professor of Anatomy, Albert von Kolliker. Within a year, medical men employed x-ray equipment as a diagnostic tool. Later research revealed many therapeutic and industrial applications, as well as the hidden dangers of x-rays.

Questions to be Considered

1. At the end of the 19th century, in Germany, for Röntgen, what in his culture molded his role as:
   a. professor
   b. physicist
   c. x-ray photographer
   d. university rector
   e. researcher
2. Are these positions current in our society?
3. If these positions still exist, how have they changed?
4. As professor of anatomy, what role did von Kolliker play?
5. Why was it important that Röntgen publicly demonstrate his discovery?
6. How has x-ray equipment been used as a diagnostic tool since this time?
7. How did later research on x-ray reveal:
   a. therapeutic and industrial application
   b. hidden dangers

Supplemental Ideas by Related Discipline

None provided

Today - 20th Century:

Introductory Statement

Today, careers exist in many types of scientific and related fields. The 20th century has brought numerous scientific discoveries and advances. In a constant effort to improve medical services and diagnosis, specialists in production and distribution work together with physicians and research scientists.

Questions to be Considered

1. What modern scientific examples can you list?

   a. Dr. Robert Rand of the University Of California Medical Center, Los Angeles, uses cryosurgery, (surgery by freezing) to correct disorders of the pituitary gland. This offers reduction of potential damage to major nerves, vessels, etc. The surgeon inserts a cryoprobe called a cold knife through the nostrils until it reaches the specific area of the pituitary. The temperature of the liquid oxygen is adjusted by regulating the rate and amount of flow. The pituitary tissue can be destroyed by temperatures of minus 170 degrees C to minus 180 degrees C for ten to fifteen minutes.

   b. Artificial spare parts are made for mitral valves, aortic valves, etc. Square patch material and artificial diameter are cut to suit the needs of the patient at the time of the operation.
   c. Transplants are being made of corneas, arteries and what must be overcome is immunity rejection.
   d. The electronic calculators developed originally for engineering are now being harnessed by medical science study of brain waves, and guide the recovery of handicapped. (James Maloney, UCLA School of Medicine)

2. How have these scientific advances changed positions and roles in our culture?
3. How are careers needed to change constantly in our dynamic society?
4. How do scientific advances affect technology and ultimately the economy:
   a. locally
   b. nationally
   c. internationally
5. How do scientific advances affect careers in areas other than science?

Supplemental Ideas by Related Disciplines

1. Literature:	a. Mayo brothers b. One Life: Christian Bernard's autobiography on heart transplants in Africa
2. Art:	Multitude of innovative art forms (cubism, expressionism, surrealism)
3. Music:	Interpretative, self expression
4. Dance:	Interpretative, self expression

EVALUATION:

For each activity developed to delivery the above concepts an assessment instrument needs to be designed. A sample is provided below:

1. Fill in the chart:

Chronological Period	Geographical Location	Role	How molded by Society	Career

2. Trace the occupational development of a scientist through the ages.

REFERENCE FOR BIOLOGICAL AND SCIENTIFIC CAREERS:

The following is a list of biological and scientific careers and the type of preparation needed to qualify for the various careers

1. For these occupations you will need a great deal of college chemistry or physics, or both, as well as high school science:
   a. engineers: aerospace, agricultural, biomedical, ceramic, chemical, civil, electrical, industrial, mechanical, metallurgical, mining.
   b. environmental scientists: geologists, geophysicists, meteorologists, oceanographers
   c. physical scientists: astronomers, chemists, physicists, food scientists

2. For these occupations you will need college biology and some college chemistry and physics, as well as high school science:
   a. physicians, osteopathic physicians, dentists, dental hygienists, assistants, laboratory technicians, registered and licensed practical nurses, optometrists, optometric assistants, pharmacists, podiatrists, chiropractors, occupational therapists, occupational therapy aides, physical therapists, physical therapy aides, speech pathologists, audiologists, medical assistants: surgical, electrocardiographic, and electroencephalographic technicians, inhalation therapists, medical laboratory workers.
   b. radiologic technologists, medical record librarians, dietitians, hospital administrators, sanitarians, veterinarians, environmental scientists; geologist, geophysicist, meteorologist, oceanographers,
   c. life scientist: agronomists, biochemists, botanists, microbiologists, zoologists.
   d. physical scientist: astronomers, chemists, physicists, food scientists
   e. technicians: engineering and science, food processing, home economists
   f. conservation: foresters, forestry aides, range managers
   h. teachers
   i. agriculture: soil conservationists, soil scientists
   j. technical writers
   k. atomic energy: health physicists

3. For these occupations, you will need post high school training in applied science:
   a. optometric assistants
   b. occupational and physical therapy aides
   c. medical assistants, surgical, electrocardiographic, and eletroencephalographic technicians, inhalation therapists
   d. medical x-ray technicians
   e. draftsmen, engineering and science technicians, food processing technicians
   f. forestry aides
   g. surveyors
   h. accounting - bookkeeping, machine servicemen
   i. dispensing opticians, optical mechanics

4. High school or vocational school courses in science are important for these occupations:
   a. dental laboratory technicians
   b. photographers, photographic laboratory occupations
   c. electricians, construction
   d. elevator constructors, structural, ornamental and reinforcing iron workers
   e. plumbers and pipefitters
   f. sheet-metal workers
   g. automobile mechanics
   h. airconditioning, refrigeration, and heating mechanics
   i. appliance servicemen
   j. diesel mechanics
   k. electric sign servicemen
   l. maintenance electricians, industrial machinery repairmen
   m. motorcycle mechanics
   n. jewelers and jewelry repairmen and watch repairmen
   o. television and radio service technicians

p. boilermakers
q. instrument makers, machinists, tool and die makers
r. photoengravers
s. stationary engineers
t. welders, oxygen and arc cutters
u. aircraft mechanics, flight engineers
v. electric light and power linemen
w. broadcast technicians
x. railroad signalmen
y. telephone linemen

RESOURCES:

1. The World of Work: Kimbrell and Vineyard.
2. Career leaflets of the United States Department of Labor, Bureau of Labor Statistics, 1972.
   a. biology
   b. science
   c. mathematics
   d. English
   e. foreign languages
   f. liberal arts
   g. social science
   h. outdoor jobs
   i. office jobs
   j. repairmen or mechanics
3. Getting Your Career into Orbit through Education and Training: The University of the State of New York, the State Education Department, Bureau of Guidance, Albany, New York, 1967.
4. Syllabi:
   a. New York City Board of Education
      1. Tanzer, Charles, et al, Curriculum Bulletin #10
      2. Burgdorf, Otto P., et al,Adventures in Biology, Curriculum Bulletin #3 - 1961-62.
   b. New York State Department of Education
5. Texts:
   a. Haskel, Sebastian and Sygoda, Modern Biology (Amsco).

   Science
   a. Jacobson, Willard
      The New Elementary School Science, Von Nostrand-Reinhold, 1970.
      New Directions in Science, 1969.
      Inquiry into: Biological, Physical, Earth and Space Sciences, 1969.

Curriculum
   a. Lawler, Marcella, Strategies for Planned Curriculum Innovation, Teacher College Press, 1970.
   b. Lange, Phil, Programmed Instruction in the School Curriculum, Teachers College Press, 1970.
   c. Lindsey, Margaret, Teacher Education; Future Directions, Association for Teacher Education, 1970.

Biology - Grade 10
"Careers Related to Biology"
Theodora Karan

CURRICULUM CONCEPT:

To understand what is biology including definition, branches, instruments used, and how the sciences help mankind and the objectives for studying.*

RELATED CAREER EDUCATION CONCEPT:

To recognize how the scientific method used in biology can also be used in making career choices. To identify careers in the fields of biology.

THEMES AND OBJECTIVES:

Themes	Objectives
Decision Making Skills	The student will describe how the scientific method is used in making career choices.
Career Awareness	Given a biology concern, the student will list possible careers in that area.

ACTIVITIES:

The following activities are suggestions for fusing a career education concept into the normal biology curriculum. Typically, several days are used during the introductory phase of the course. Therefore the following suggested ideas would take place over several days.

1. One of the areas introduced is that of Health. The following questions may be asked:
   a. In the Health Areas, to help us learn about structure and function, what kind of understandings would the following scientists give us?
      (1) anatomist
      (2) physiologist
      (3) physical therapist
      (4) kineseologist
      (5) laboratory researcher
   b. With a well functioning body it is also important to have good mental health. What type of person can give us information about the nervous system?
      (1) Neuro-anatomist
      (2) Neuro-surgeon

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* The curriculum concept is found in teacher's notes.

    (3) Neurologist
    (4) Psychiatrist
    (5) Psychologist

2. Another area is that of Environment, the following question may be considered:
    a. How do the following scientists help us develop appreciation for the interdependence of the world around us:
        (1) zoologist
        (2) botanist
        (3) forest rangers
        (4) astronomers
        (5) astronauts
        (6) geologist
        (7) geographers
3. In the Consumership Area ask the following:
    a. How do we establish scientific principles and critical analysis in the development of intelligent purchasing?
    b. How do we apply our skills and knowledge in the following areas:
        (1) mathematics
        (2) reading
        (3) legislation
4. An entire lesson could be build around the scientific method. The following chart could be developed.

How can we use the scientific method:

TO UNDERSTAND AND DEVELOP SCIENTIFIC ATTITUDES	TO HELP US CHOOSE A CAREER
1. Recognize a problem a. nothing will happen without a cause b. curiosity about and interest in phenomena in the environment c. repudiation of superstition	1. Recognize or become aware of career opportunities
2. Isolate the disturbing elements	2. Isolate the pros and cons of career possibilities
3. Form a hypothesis a. this informal guess makes one more reluctant to accept authority b. formulate a plan or procedure c. use a control	3. Form career hypothesis
4. Observe carefully and apply patience	. Observe the practicality of choosing this career
5. Verify your data by checking several times: a. verification by other scientists	5. Verfiy your choice by resourcing information about the career

b. consider all aspects of the problem by expressing an opinion	
6. Draw a conclusion a. willingness to test conclusions b. readiness to change conclusions	6. Draw a conclusion a. as to the appropritiveness of the particular career you plan to pursue b. find an alternate approach when necessary
7. Apply the results to a new problem	7. Apply the results to pursuing the chosen career

EVALUATION:

1. What types of scientists contribute to our knowledge?
2. How do we apply the scientific method to:
   a. everyday life and life styles
   b. choosing a career

Biology - Grade 10
"Interrelatedness of Life Functions and Economic Activities"
Theodora Karan

CURRICULUM CONCEPT:

To understand what biology is including definition, branches, instruments used, and how the sciences help mankind and the objectives for studying.*

RELATED CAREER EDUCATION CONCEPT:

To be aware of the inter-relationship of life functions and activities of an organism with related career activities.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	Given a life function and activity of an organism, the student will identify a related career activity.
Economic Awareness	The student will describe the similarities between cell theory and corporation theory.

ACTIVITIES FOR SESSION ONE:

Introduction
The first half of this lesson should be devoted to looking at the basic life functions. Show chemicals that "grow" when placed in water. Ask: Are all things that grow living?

Tasks
Follow up the introductory activities with the following question: How do we relate the basic life activities to areas of medicine and other related careers? Elicit student response and develop a chart such as the following:

Life functions & activities of an organism	Related career activities
1. Nutrition Processing of raw materials and making them available for physiological activities: a. Food getting - to obtain food b. Ingestion - to place food in the body of the digestive tract c. Digestion - makes insoluble food soluble so that it can be used by the body d. Egestion - elimination of waste	Dietician Areas of the food industry a. produce b. food shipping c. processing d. restaurant Farmer and Agriculturist Gastroenterologist Sanitarian

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* The curriculum concept is found in teacher's notes.

"Interrelatedness of Life Functions and Economic Activities"

2. Transport involves the intake (absorption) and distribution (circulation) of essential compounds.	Cardiologist X-rays for diagnosis Heart surgeon Heart transplant surgery (plastics) Electronic engineering pace maker scientific supplies
3. Respiration is the release of harmful or potentially harmful substances which form as waste products of metabolism.	Pulmonary medical fields Oxygen tanks & other equipment Engineer Chemist
4. Excretion is the process of getting rid of harmful or potentially harmful substances which form as waste products of metabolism.	Urologist Laboratory urine analyst Dialysis machinery Plastic tubing
5. Secretion is the production of useful substances by the cell, tissue, or organ of a living thing (insulin, adrenalin).	Internist Laboratory analyst
6. Sensitivity (irritability) is the ability to respond to a stimulus.	Psychologist Psychiatrist Guidance personnel
7. Reproduction is the process of producing new individuals of the same or similar type as itself (to maintain the continuation of life).	Gynecologist Geneticist Genetic counselor Planned parenthood fields
8. Synthesis involves those chemical activities by which complex molecules are created from simple compunds. Growth is an increase in size.	Internist Laboratory diagnostician
9. Movement and locomotion enables a change in place, position, or shape.	Kineseology Physical therapy Indirect fields: foot wear, wheel chairs, dance and choreography, health clubs, gymnastics and acrobatics

"Interrelatedness of Life Functions and Economic Activities"

10. Regulation involves the control of various physiological activities in such a way as to maintain stability through coordinated activity in a constantly changing environment.	Regulation is by production control to: 1. Maintain quality of product 2. maintain facilities
Metabolism is the sum total of all chemical changes. a. Anabolism is the building up of protoplasm b. Catabolism is the breakdown of protoplasm	Career metabolism is the sum total of: 1. production 2. distribution

Summary
None provided.

ACTIVITIES FOR SESSION TWO:

Introduction
After a lesson on how organisms carry on a lesson comparing living systems can take place.

Tasks
1. Have students compare the following living systems:

Organisms Carry On:	Business Organizations Carry On:
1. in a highly organized and complex manner	same
2. require and use energy	same
3. are "chemical factories"	are production factories
4. receive and respond to stimuli (external and internal factors)	same
5. in a Homeostatic environment a. well balanced b. in a state of equilibrium	stability of: 1. input 2. production 3. steady growth - strikes cripple 4. output of desired achievement

2. Have students compare the following non-living systems

Organisms	Company
organic -----) inorganic	profitable -----) bankrupt

Creates need for the following fields:

cremator, embalmer, mortician, casket maker, grave digger, head stone maker	banker, creditor, receiver

.
.

No Homeostasis

3. Have students compare the conditions necessary for the life of the following:

Organism	Company
a. oxygen	a. personnel
b. water	b. facilities
c. food	c. finances
d. proper pressure	d. raw materials and market
e. proper temperature	e. distribution

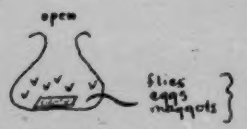
Summary
None provided

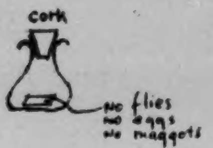
ACTIVITIES FOR SESSION THREE:

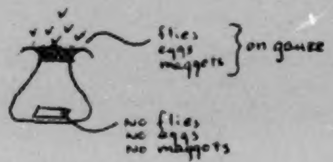
(The following is not a career education lesson but is included to show sequence between other lessons which have some career education concept under consideration.)

Introduction
None provided

Tasks
1. How did Redi prove that spontaneous generation wasn't possible?
   a. Abiogenesis is the theory of spontaneous generation.
   b. Biogenesis is the theory that life comes from life; "life begets life". Show prepared jars illustrating Redi's experiment.







2. How might life have originated?
   a. Primitive atmospheric gases - ammonia (NH_3), methane (CH_3), hydrogen (H_2)
   b. Water (H_2O) - Show the electrolysis of water by the Hoffman apparatus.
   c. Available energy - Sun
      Lightning, ultraviolet rays, x-rays
   d. The elements in the gases were split away and a recombining of the elements (synthesis) to make other organic molecules form.
      Gases + energy -- life (organic molecules), sugar, lipids (fats), amino acids (protein) (N)
   e. organic molecules → (cluster) → aggregates of molecules → cell → organism

Summary
None provided

"Interrelatedness of Life Functions and Economic Activities"

ACTIVITIES FOR SESSION FOUR:

Introduction

Review with students the previous lesson on spontaneous generation. Explain intent of this lesson--to compare cell theory and corporation theory to show similarities.

Tasks

Have students compare cell theory with corporation theory. The following chart could be generated:

The Cell Theory	The Corporation Theory
1. The cell is the unit of structure and function of all living things.	1. Individual enterprise is the basic unit of industrial activity.
2. All cells come from (reproduce from) pre-existing cells by a process of cell division.	2. Repeated business growth is the unit of economic growth.
3. All living things began life as a single cell. Some remain single cells, and others develop from single cells by repeated cell division and others change.	3. All industry began life as individual enterprises. Some remain individual enterprises and others become conglomerates.
4. Protoplasm is basically the same in all organisms.	4. Dividends multiply and the company expands, sometimes changes in format, and may become part of the stock exchange.
5. Every living thing is the result of the coordinated activities of its cell.	5. Business is the result of the coordinated activity of its divisions.

Two exceptions:
1. The first cell could not have arisen from a pre-existing cell.
2. There may be other units of structure and function.
    a. Self duplicating (mitochondria and chloroplasts)
    b. Modified organizational patterns: slime molds, bread molds, certain types of muscle cells, viruses

Summary

None provided

"Interrelatedness of Life Functions and Economic Activities"

ACTIVITIES FOR SESSION FIVE:

Introduction
None provided

Tasks
How did the following scientists contribute to our knowledge about the cell theory?

1. Anton von Leeuwenhoek......the simple microscope.
2. Robert Hooke...............in 1665, coined the term cell as he observed the microscopic structure of cell walls in dead cork cells.
3. Robert Brown...............in 1831, reported the presence of the nucleus in a variety of cells.
4. Matthias Schleiden.........in 1838, established the idea that all plants consist of cells.
5. Theodor Schwann............in 1838, established the idea that all animals consist of cells.
6. Jan Purkinje...............in 1840, coined the word protoplasm to apply to the colloidal substance found within cells.
7. Hugo von Mohl..............suggested the term protoplasm.
8. Felix Dujardin.............emphasized protoplasm and its function.
9. Dutrochet..................all living things are made of cells and that whatever activities go on in any plant or animal are performed by cells.
10. Max Schultz................about 1850, established the fact that protoplasm is the physical basis of life and is essentially the same in all cells.
11. Rudolf Virchow.............in 1858, suggested "All life comes from life", and that disease is the malfunctioning of a cell, and that cells control the normal functioning of living things.
12. Eduard Strasburger and Walter Fleming.............described cell reproduction in plants.
13. Ross Harrison and Alexis Carrel.............grew cells in tissue culture and outside the body.

Summary
None provided

RESOURCES:

None

EVALUATION:

1. Chart the following:

"Interrelatedness of Life Functions and Economic Activities"

Life Function	Definition	Related Career Activity
1. Nutrition		
2. Transport		
3. Respiration		
4. Excretion		
5. Secretion		
6. Sensitivity		
7. Reproduction		
8. Synthesis		
9. Movement and Locomotion		
10. Regulation		

2. Describe in a paragraph the similarities between cell theory and corporation theory.

Biology - Grade 10
"Classification of Plants and Animals and Related Occupations"
Theodora Karan

CURRICULUM CONCEPT:

To classify animals or plants as to features, whether an autotroph or a heterotroph, and to provide examples of each.*

RELATED CAREER EDUCATION CONCEPT:

To recognize the various related occupations to animal and plant life.

THEME AND OBJECTIVE:

Theme	Objectives
Career Awareness	Given ten specimens which are classified, the student will list occupations related to each specimen.

SUGGESTED OCCUPATIONS RELATED TO CLASSIFYING PLANTS AND ANIMALS:

The following chart can be used when developing lessons on the classification of plant and animals. No strategies for delivering the concepts are suggested.

Classification	Features	Hetero or Autotroph	Examples	Occupations related to their study
Kingdom: Protista				taxonomist zoologist
Phyla:				
a. Protozoa	1.no chlorophyll 2.unicellular 3.motile	H	ameba paramecium	protozoologist pathologist
b. Algae	chlorophyll	A	green red brown	Food industry (Chinese food)

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* The curriculum concept is found in the teacher's notes.

"Classification of Plants and Animals and Related Occupations"

c. Fungi	no chlorophyll molds (hyphae etc)	H	edible mushrooms poisonous & psychydelic mushrooms athletes foot	Food industry pathologist
d. Slime mold	no chlorophyll	H		
e. Bacteria	cocci rod spiral			Bacteriologist Food industry flavor food tan leather
Kingdom: Plants (phytes)	chlorophyll	A		Botanist Horticulturist
Phyla: a. Bryophytes	1. no conducting tubes 2. sexual reproduction by eggs & sperm 3. asexual reproduction by spores		mosses liverworts low plants	
b. Tracheophytes	1. conducting tubes 2. leaves 3. stems 4. roots		ferns horsetails	
Spermatophytes Gymnosperms	cone bearing		pines spruces cedars	Forest Ranger

"Classification of Plants and Animals and Related Occupations"

Anglosperms	seed plants (if the ovary)		shrubs fruits vegetables	Agriculturist Farmer
Animals	no chlorophyll	H		
Phyla: Invertebrates	no backbone			
a. Sponges	1. many animals live together 2. two layered 3. hollow in the middle 4. canals in the body wall			Sponge diver
b. Coelente	1. two layered 2. around a cavity		hydra jellyfish coral	Jeweler
c. Flatworms	parasites in the body		planaria liver fluke	Pathologist Pharmaceuticals
d. Roundworms	parasites in the body		hookworm trichina threadworms	"
e. Segmented worms	1. specialized digestive tract 2. ventral nerve 3. blood vessels		earthworms sandworms leeches	Farmer uses for soil aeration

"Classification of Plants and Animals and Related Occupations"

f. Mollusks	1. soft body 2. hard outer shell made of lime 3. well developed nervous system	clams oysters mussels snails	Pearl diver and jeweler Fisherman Food industry
g. Arthropods	1. segmented bodies head thorax abdomen 2. exoskeleton (chitin) 3. Jointed appendages	insects crayfish lobsters spiders	Fisherman Food industry - honey production Entomologist
h. Echinoderms	spiny skin	starfish	Harmful to Fishing industry
Vertebrates with backbone			
i. Chordates	1. gills some time during development 2. endoskeleton 3. dorsal nerve cord		Comparative anatomist Zoo keeper Pet shop owner
Class:			
Fish	1. gills 2. scales		Ichthologist
Amphibia	1. Metamorphosis 2. gills & lungs	frog salamander	

"Classification of Plants and Animals and Related Occupations"

Reptiles	1. covered eggs 2. lungs	snakes turtles lizards	Fashion industry uses skins
Birds	1. warm blooded 2. feathers 3. four chambered heart		Fashion industry uses feathers
Mammals	1. placenta 2. milk glands	multiple types humans whales	Hunters Fashion industry Food industry

EVALUATION:

Give the student 10 specimens and have them list three related occupations per specimen.

SOCIAL STUDIES

LESSON/UNIT TITLE	AUTHOR (s)	# OF LESSONS
The Study of Africa		
The Study of Africa--Economics and Careers	Lucy Becker	1
The Topography of Africa--Related Careers	Lucy Becker	2
How Climate Influences Jobs	Lucy Becker	1
How Mineral Resources Influence Careers	Lucy Becker	1
Tribes and Needs of Society	Lucy Becker	1
Values Differ in Different Societies	Lucy Becker	1
How Means of Communication Meet Societal Needs	Lucy Becker	2
What Careers Involve Studying Other Cultures?	Lucy Becker	1
Occupational Changes Affect Nations	Lucy Becker	1
Careers Needed in Westernization of a Nation	Lucy Becker	1
The Role of Africa To-day	Lucy Becker	1
The Study of the Soviet Union		
Creating a Soviet Newspaper	Lucy Becker	1
The Influence of Geography on Careers	Lucy Becker	1
How Peter the Great's Changes Brought New Careers	Lucy Becker	1
Life Styles and Revolution	Lucy Becker	1
Effect of Communism on Careers	Lucy Becker	1
American History		
The Relationship Between One's Value System and Career Choice	Lucy Becker, Ken Tewel, and Robert Klein	3

Social Studies (The Study of Africa)- Grade 9
"The Study of Africa - Economics and Careers"
Lucy Becker

CURRICULUM CONCEPT:

To understand the value of studying African History.*

RELATED CAREER EDUCATION CONCEPT:

To be aware of how the study of Africa influences economic development in the United States and to identify the various careers which evolve out of relationships between nations.

THEMES AND OBJECTIVES:

Themes	Objectives
Economic Awareness	The student will describe the relationship between trade and diplomacy.
Career Awareness	The student will identify careers related to international relations; i.e. diplomat, importer.

ACTIVITIES:

Introduction

This segment is the first 20 minutes of a 40 minute period of instruction which presents an overview of the study of Africa.
The Lesson may be introduced using the following statements:

1. Africa is a country.
2. Africa is filled with wild animals.
3. Africans are naked drum beating savages.
4. Africa has no industralization.
5. Africa, an underdeveloped area, is unimportant in world affairs.

Have students comment in writing about these sterotypes. After they have completed the task have them report on their responses noting the inaccuracies of the statements.

Tasks

1. From the statements made in the introduction, provide a rationale as to why one studies Africa. Include in the discussion the ideas of trade. Show location of Africa on world map. Ask for responses to the following questions:

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*The curriculum concept is found in the book, The Afro-Asian World: A Cultural Understanding, Edward Kolevzon, Boston: Allyn and Bacon, Inc., 1969.

    1. What does Africa import and export?
    2. What careers are associated with this trade?
    3. Why is this location important for trade?
    4. How is this of benefit to the United States?
2. Show class a picture of a meeting of the United Nations. Ask the following questions:
    1. Why is Africa important in the United Nations:
    2. What is the role of a diplomat?
    3. What do you think the life of a diplomat is like?
    4. Why would his life be exciting?
    5. What problems would he face in his daily life?
    6. How may trade influence the diplomacy of a nation?
3. Ask the students to break up into small groups of three and in three minutes see how many careers they can generate which would function in either the trade or diplomatic area. Perhaps you may wish to have a prize for the winning team.
4. The remaining portion of the lesson should deal with other aspects of Africa's importance in the world.

Summary

In the summary be sure and emphasis that one value of studying Africa is to understand how one might function in their society through their career choice.

RESOURCES:

Pictures of United Nations
Map of the World

EVALUATION:

Have students write a paper on how trade influences diplomacy and purposely insert careers related to each area. Have them underline the careers chosen.

Social Studies (The Study of Africa)- Grade 9
"The Topography of Africa - Related Careers"
Lucy Becker

CURRICULUM CONCEPT:

To describe the topography of Africa.*

RELATED CAREER EDUCATION CONCEPT:

1. To explain how map making skills have been greatly extended by space exploration and increased aerial travel.
2. To describe how topography influences people's careers and how they have developed as a result of increased reliance on maps.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student will identify jobs which are related to map making.
Career Awareness	The student will name jobs other than map making which utilize longitudinal and latitudinal skills.
Career Awareness	Given a particular topographical area, the student will name jobs suited to that area.

ACTIVITIES FOR SESSION ONE:

Introduction

Distribute longitude and latitude grid to students (Social Studies - Grade 9, Curriculum Guide p. 272-273). Have students plot proints and connect dots to draw map of Africa. (Note: This serves as a review of the use of longitude and latitude plus as an introudction to the study of topography of Africa.) Describe the aim of the lesson to the students.

Tasks

1. On a mercator projector map review with class longitude and latitude concepts.
2. Have students assume role of a ship captain or airplane navigator near or over Africa. Have them simulate various routes using concepts of longitude and latitude,
3. Have students list other careers related to maps and explain relation-

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*The curriculum concept is found in the book, The Afro-Asian World: A Cultural Understanding, Edward Kolevzon, Boston: Allyn and Bacon, Inc., 1969.

ship: agriculture, weather prediction, conservation, aerial map photography, infrared photography, map painting and publishing, geology, etc. (Reports assigned on each).

Summary

Discuss with the students the following questions:

1. How do longitude and latitude help us find various places on a map?
2. How are longitude and latitude important in navigation?
3. What jobs are related to maps and their use?

Explain the task for the next session.

ACTIVITIES FOR SESSION TWO:

Introduction

1. Review of concepts studied in the previous session
2. Introduce topographical map of Africa. Using the map of Africa have students pretend they are leading a safari. Use longitude and latitude concepts to plan route.

Tasks

1. Distribute physical feature maps to class. Have class plan a trip through Africa for purposes of trade, tourist guide leader, a search for oil, or a hunt for lost civilizations. Ask what geographical areas of Africa would each of the above be most likely be interested in?
2. Have students go to the library to do additional research on the above careers and prepare a report relating the necessity of those careers to the study of the topography of Africa.
3. Have students obtain from map and list the various topographical features of Africa. Discuss and list with students the various occupations that are suited to the various topographical areas of Africa.

Occupation	Topographical Areas
Herding	Desert oasis
Hunting	Jungle areas
Farming	Costal plain, desert oasis, small areas of fertile land
Mining	Areas of mineral resources

Summary

Summarize with the class the following:

1. How has the topography of Africa influenced the careers of the people involved?
2. What careers are related to maps?

"The Topography of Africa - Related Careers"

RESOURCES:

Textbook
Topographical maps
Mercator projection maps
Grids and Longitude-Latitude notes (duplicated by teacher and distributed to class)

EVALUATION:

Have students complete the following chart and paragraph statement.

1. Map Related Jobs	Topographical Features of Africa	Jobs Related To Topographical Features

2. Describe other careers which are related to maps.

Social Studies (The Study of History)- Grade 9

"How Climate Influences Jobs"

Lucy Becker

CURRICULUM CONCEPT:

To describe the climate of Africa.

RELATED CAREER EDUCATION CONCEPT:

To explain how climate influences jobs of people.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student will name jobs which are practicable for different climatic areas of Africa.
Career Awareness	The student will describe the effect of climate's influence on jobs in his life.

ACTIVITIES:

(Note: Before this lesson each member of the class will have completed his own climate maps of Africa; climate area will be colored a different color for identification)

Introduction

Have class take out climate maps of Africa. Show class pictures (obtainable from the United Nations) illustrating the different types of climates in Africa. Discuss the characteristics of the various climates. Ask them to consider the following:

> What careers are possible for a person living in the Tropical Rainforest, etc.? Proceed to fill in the following chart-working with the class.

Name of Climate	Possible Careers
1. Tropical Rainforest	1. hunter, gatherer of food
2. Tropical Savanna	2. tourist guide, game warden, resort operator bus dirver
3. Tropical Steppe	3. marginal farming
4. Desert	4. herding in an oasis, leading a caravan, trade

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*The curriculum concept is found in the book, The Afro-Asian World: A Cultural Understanding, Edward Kolevzon, Boston: Allyn and Bacon, Inc., 1969.

5. Humid Subtropical	5. agriculture, resort operators
6. Mediterrarean	6. farming

Discuss with the class the aim of this lesson and the reason for studying.

Tasks

Divide the class into committees. Have students pretend that each group lives in a different climatic area of Africa. Have students devise a brief skit simulating the lives and careers of each area. Have them include ways the careers of these people greatly influence their life styles. Life style factors might include the following: interests, environment, economics, beliefs and attitudes, education, abilities, social.

Summary

Give class the following quotation:
"The climate of Africa has a definite influence on peoples' careers." Ask students to comment on this quote based on what they learned in class.

RESOURCES:

Pictures depicting different climates in Africa.

EVALUATION:

Have the students complete each of the following questions with four to five sentences.

1. How does climate influence the careers of Africa? How does climate influence our career choices?
2. What careers are practiced in various areas of Africa?

Social Studies (The Study of Africa)- Grade 9
"How Mineral Resources Influence Careers"
Lucy Becker

CURRICULUM CONCEPT:

To identify the mineral resources of Africa.*

RELATED CAREER EDUCATION CONCEPT:

To understand how mineral resources of Africa influence the choice of careers.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	The student will identify mineral resources that exist in Africa.
Career Awareness	The student will name the careers in Africa that are derived from these resources.
Career Awareness	The student will name the careers in other parts of the world that are related to these resources.

ACTIVITIES:

Introduction
1. Distribute a resource map of Africa to the class. (May duplicate from New York City Curriculum Bulletin p. 267 or other sources). Ask "What conclusions can we draw about the resources of Africa by looking at the map?"
2. Discuss the mineral wealth of Africa - How do the resources of Africa influence the careers of the people?
3. Discuss the purpose of the lesson and reason for studying.

Tasks
Have students study how resources of Africa influence the careers of the people. One or more of the following tasks may be used:
1. Students will each select one of the resources indicated on the map.
2. Students will prepare a report on that resource from its origin to the finished product. In the report students will list the jobs involved from start to finish.
3. Students will imagine themselves involved in one of these jobs and will describe what their lives would be like i.e. fisherman, gold miner, worker on banana plantation etc. (included will be life-style type of work involved, etc.)

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*The curriculum concept is found in the book, The Afro-Asian World: A Cultural Understanding, Edward Kolevzon, Boston: Allyn and Bacon, Inc., 1969.

4. Students will research the careers in the U. S. which are related to the resources of Africa i.e.- jeweler, fruit dealer, etc. Students may produce a chart of the above.

Summary

Have students report to the class the various jobs that related to resources of Africa. Place list on board.

RESOURCES:

Product map of Africa.

EVALUATION:

Have students fill our the chart below.

Resources	Careers in Africa	Careers in Other Areas of World

Social Studies - The Study of Africa - Grade 9
"Tribes and Needs of Society"
Lucy Becker

CURRICULUM CONCEPT:

To understand the function of a tribe.*

RELATED CAREER EDUCATION OBJECTIVE:

To discover how tribes help people meet the needs of society.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	The student will identify the needs of society.
Attitudes and Appreciations Economic Awareness	The student will explain the way in which individuals in a society meet the needs of society.

ACTIVITIES:

Introduction
1. Have students list the basic things they need in order to survive. Then have students list the things they want in order to make life more enjoyable.
2. Ask students as to how these needs are met in our society. This will lead to the discovery that different societies have different needs that are met in different ways.

Tasks
1. Working from the list generated in the introduction have students discuss how tribes meet the needs of the society they serve. The list should include but not be limited to the following:
    - food gathering or producing
    - shelter
    - security
    - leadership (type of government)
    - moral values
    - leisure time activities

   Refer to the New York City Curriculum Guide pages 289-291, Readings I-IV.

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*The curriculum concept on which this lesson is based is found in the New York City Curriculum Guide pages 289-291, Readings I-IV.

2. Assign a special report on the Masai (an African tribe of herders in which cattle are the most prized possession). After the report has been given, have students explain how the Masai are a case study of a typical tribe.

Summary

Have students summarize the basic functions that are served by the tribe as generated in the lesson. Also l[illegible] ways in which the tribe helped the individual meet his needs.

EVALUATION:

1. Have students list at least five factors that members of a society need in order to survive.
2. Have student write an essay of 150 words which explains how individuals in the society meet the needs of a society.

Social Studies - The Study of Africa - Grade 9
"Values Differ in Different Societies"
Lucy Becker

CURRICULUM CONCEPT:

To describe the values of tribal societies.*

RELATED CAREER EDUCATION CONCEPT:

To explain what studying the values of a society tells us about the society.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	The student will list values of African tribal societies.
Attitudes and Appreciations	The student will describe through a comparative analysis the values of an African society with the values of our society.
Attitudes and Appreciations	The student will relate society's values to the work ethic and careers.

ACTIVITIES:

Introduction

1. Distribute copies of the following story to the class:

The Leopard

I walked slowly through the forest. I was alone and I was afraid. Africans usually do not walk through the forest alone.

The noises of the forest made me jump. I saw the trees and flowers and I imagined that they were monsters waiting to eat me. Slowly I continued to walk through the jungle.

Suddenly I sensed danger. I crouched down beside some brush and I waited. Then I saw it! A huge leopard emerged from the jungle and started to drink at the nearby water hole.

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*The curriculum concept on which this lesson is based is found in the teacher's notes.

The leopard spotted me! It bared its teeth and started to spring at me. I paniced for a moment, but I remembered my training. I let go my poisoned arrow. It hit him, but the leopard kept coming, my arrow had made him angry.

I felt the leopard's breath against my face. My spear had been knocked out of my hand - I was defenseless. My hands were tightened around the leopard's neck, the arrow was making him weak but I was wounded too. All I could think of was "Don't let go, press your hands against his neck." I continued to press against his neck and then I passed out.

Sometime later my father found me lying in the jungle. The leopard lay beside me dead. I was carried back to the village and was nursed back to health. I will always carry on my body the scars of the leopard's claws.

After the students have read the story, ask: Why is the boy in the jungle? What specific training or skills were necessary for him to accomplish this task? (Note: Develop idea that this is a manhood ritual prescribed by this specific tribe. Manhood rituals differ from tribe to tribe.)
2. Describe to the student the purpose of the lesson.

Tasks

1. Have students determine what values are important to this particular tribe. How did the boy learn them? How are these related to their occupations? Place on the board:

Values of Tribe	Probable Occupations
courage	hunting
hunting skills	necessity of tracking
survival skills	down animals
ability to survive	survival while hunting

2. Have students discuss the values which are important in our society.
3. Generate from the students what values school considers important.

Values of School
attendance
punctuality
concentration
neatness
ability - creativity, etc.

(Add other values that are given by the students)

Why do you think schools teach these values? Which do you think will be important to you in your careers? Why?
(Note: Point out that the values considered important by our society are first taught to students in school and then carried over into work world. This should be related to material studied in the World of Work class. Discussions should be held with World of Work instructor for additional points of correlation.)

Summary

Have students summarize the following questions:

1. What is a value?
2. What types of values are chosen by tribal societies?
3. Why do they select these particular values?
4. What values do we consider important in our society? Why?

EVALUATION:

Ask students to write a composition including the following points.

1. What values are included in the story "The Leopard"?
2. How do these values compare to the values of our society?
3. How do these values relate to training for careers?

Social Studies - The Study of Africa - Grade 9
"How Means of Communication Meet Societal Needs"
Lucy Becker

CURRICULUM CONCEPT:

To understand what methods of communication are used by African societies.*

RELATED CAREER EDUCATION CONCEPT:

To describe how communication modes reflect the occupational needs of society.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	The students will describe the ancient and modern forms of communication used by African tribes.
Attitudes and Appreciation	The student will describe types of communication with the needs of society.
Career Awareness	The student will describe his own need for communication in terms of careers.

ACTIVITIES FOR SESSION ONE:

Introduction

1. Distribute to class rexographed copy of "Is Writing the Only Way to Judge How Advanced a Culture Is?" taken from Curriculum Bulletin, N.Y.C. Board of Education, p. 275, (selection deals with African tribes using drums for communication and why the drum satisfied the needs of their society). Explains that we will see how communication needs differ between African society and ours.
2. Ask students to read the selection. Ask the students to consider, Why writing is considered important in our society? (Note: Confer with both English and World of Work instructors since this topic will be covered in both courses.)

Tasks:

1. After reading the selection and covering the first question have

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*The curriculum concept on which this lesson is based is found in the New York Schools Curriculum Guide.

students form small groups to answer the following two questions:
  - a. Why didn't the African living years ago have to write? What need did they have to communicate?
  - b. What forms of communication best fulfilled his needs?

2. Have students draw on information they have acquired in their English class to discuss their need for communication, in the area of job application, the need for effective speech in selling oneself, etc. Then have them consider how our communication needs are different from those of the Africans? Tribal Africans could communicate danger approaching, strangers in the area, etc.

Summary

Have students summarize the sessions learnings:
What is communication? What different forms of communication are there? How do different types of communication meet the needs (values, careers, etc.) of society?

ACTIVITIES FOR SESSION TWO:

Introduction

Distribute copies of the following story to the class:

"Into the Hand of Strangers"

Atum lies in the dark, he is afraid and he cannot sleep. Tomorrow he is going to do something his father has never done, something his grandfather has never done. He is going to travel to a city fifty miles away from his home.

Morning comes quickly and Atum sits with his father in front of his feet. His sister brings them breakfast and they sit in front of the hut eating. "Change your mind" says his father. "Stay home if you wish." In the daylight Atum's fears have turned to curiosity. "No", he says, "I must go." "Suppose you are sick," says his father, "or suppose you want a drink of water. How will you speak to them. Their language sounds like the noises of the monkeys in the trees. You will not be able to understand them."

I will find another boy who has been to school" replied Atum. "I will talk to him in English." "I don't like English" said his father. "It's the white man's language." "My teacher says that now that we speak it, English is our language too. It will help me on my trip." It was time to go. Atum said good-bye to his father, his mother and his brothers and sisters. Then he walked to the road and waited for the bus that would come along sometime that morning.

After students have read the selection teacher asks:
Why is Atum afraid?
What is his father's major fear about his trip?
(Establish the fact that two villages 50 miles apart speak different languages.)

Tasks

1. At this point introduce broader concepts such as the idea that there are 800 different languages in Africa and as many as 60 in a country such as Nigeria. Ask the following:
   a. What conclusions can you draw about the way the people in these villages make a living?
   b. What problems will they face if they undertake trade on business between villages?
   c. Why in villages do many of the younger people now speak English or another European language?
   d. What changes could occur in Africa when many people are are able to communicate with each other?
2. Ask students to imagine what would happen in this country if people all knew different languages. Pretend that you are a)a businessman looking for workers b)a worker looking for a job c) a teacher d) a doctor e) a lawyer f) the president of an organization (etc.) (Note: Teacher may add to or change the list to suit the needs of the class) Students may be asked to write or act out what would happen in their career if they were unable to communicate with others.

Summary

Have students summarize the 2 sessions considering the following:

a. Why is communication essential for doing any kind of business with other people?
b. What problems may arise both in Africa and in the U.S. when communication is made difficult or does not exist?

EVALUATION:

Have students write a five to six sentence answer to the following questions:

a. How did drum communication meet the needs of the African tribes years ago?
b. What problems exist in communication within Africa today?
c. What problems exist in communication within Africa concerning laws and government?
d. Why is better communication needed for our careers?
e. What communication tools must we have to prepare for future careers?

Social Studies (The Study of Africa)- Grade 9
"What Careers Involve Studying Other Cultures?"
Lucy Becker

CURRICULUM CONCEPT:

To understand the cultural achievements of Africa.*

RELATED CAREER EDUCATION CONCEPT:

To understand how careers in our society are related to the study of other cultures?

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The students will name careers that deal with the study of other cultures.
Career Awareness and Educational Awareness	Given a career, the student will describe what kind of requirements are needed for specific jobs and how it applies to the study of specific cultures.

ACTIVITIES:

Introduction

(Note: Prior to this point in time the class will have spent several days studying the cultural achievements of Africa, including masks, art, sculpture, etc. It is hoped that an audio-visual approach will be employed and that the students will have been exposed to a variety of media.)

Tell class: We have spent several days looking at examples of African Art. Who do you think found or made the articles we have looked at? (Note: models pictured on P. 279. N.Y.C. Curriculum Guide may be borrowed from museums so that students may actually handle them.) Who wrote the commentary for the records that we listened to? Who made the filmstrips that we watched? etc. (From these questions the class will become aware of the various careers associated with exploring the cultures of other people.) Develop list based on students' responses. The list may include (but not necessarily be limited to):

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*The curriculum concept is found in the book, The Afro-Asian World: A Cultural Understanding, Edward Kolevzon, Boston: Allyn and Bacon, Inc., 1969.

"What Careers Involve Studying Other Cultures"

Anthropologist - Archaelogist
Museum Curator - those who make copies of originals
Newspaper Reporter
Safari Leader
Producer of Educational Materials
    -Film producer etc. Record producer
    -Technical work on films - Author of material for films and records, etc.

Tasks

1. Develop a list of the various careers that touch upon the artifact from its discovery in Africa until it is presented as an educational tool in the classroom.
2. (Prior to this the teacher has conferred with the school librarian to set up an appropriate activity for the class.)
   Students will be sent to library to do research on the listed career that most appeals to them.
3. Students will prepare reports dealing with the career they have chosen.
4. Students will give oral reports based upon their research.
5. Students may visit a facility in which the career they have done research on is used. There might include visits to a local museum, to an educational publishing or film producing company, etc. These students will then report back to the class about their visits. (Reports will include the requirements of the career, its relationship to the study of a foreign culture, and the availability of such jobs here.)

Summary

Using the classroom setting as a focal point have students consider:
   a. What careers were needed to produce these artifacts for the classroom.
   b. What are the requirements of these specific careers?

EVALUATION:

Students will be asked to complete the chart below:

Career	Requirements	How the career helps us to understand Africa

Social Studies (The Study of Africa)- Grade 9
"Occupational Changes Affect Nations"
Lucy Becker

CURRICULUM CONCEPT:

To describe how European nations divided Africa.*

RELATED CAREER EDUCATION CONCEPT:

To describe how changes in occupations in Europe led to the division of Africa.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The students will name new careers that were related to the Industrial Revolution of the 19th century.
Economic Awareness	The students will list reasons that colonies were needed as an adjunct to industrialization.
Career Awareness	The students will list careers related to colonization.

ACTIVITIES:

(Note: This lesson is part of the study of the history of Africa. It will follow lessons on the early empires of Africa, the slave trade, and the early explorers. Teacher will introduce the study of the division and colonization of Africa by demonstrating the relevance of such study to the world in which we live. This may be done in a variety of ways)

1. Use filmstrip and record combination Africa in Ferment (this shows the problems faced by new nations related to colonial experiences.)
2. Use clippings from a newspaper dealing with problems facing new nations of Africa and discuss them with class; need to industrialize, government instability, tribal warfare, etc.
3. Place quotation on the board "Many of the problems facing Africa today stem from colonization by the Europeans." Ask students to discuss quotation and express their own opinions. This may include: lack of consideration to tribal boundaries, lack of unity, change of cultures.

From any of these introductions the transition may be made to the topic and students should know: Why must we learn about the colonial experience of Africa? How imposition of European ways has caused problems for African nations today, etc.

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*The curriculum concept is found in the book, The Afro-Asian World: Cultural Understanding, Edward Kolevzon, Boston: Allyn and Bacon, Inc, 1969.

"Occupational Changes Affect Nations"

Tasks

1. Have students list changes that were occuring in Europe as a result of the industrial revolution. What new jobs were arising at the time in Europe? (List may include any other new careers listed by the students)
    - New Jobs
    - manufacturer
    - investor
    - exporter and importer
    - factory worker, etc.
2. Have students consider why some people were nore interested in Africa at this time? What did Africa have that leaders of industry needed?
    - Africa had:
    - undeveloped resources
    - cheap labor
    - potential for investment
    - potential for market
3. Have students set up imaginary situation in which they have a business in England. Class will incorporate African resources, labor, etc. in their plans for expansion. Students should see how the use of colonies enabled them to produce their product more cheaply than if they had to depend on European labor, resources, etc.
4. What people other than businessmen were interested in ruling Africa? Discuss role of missionary, army officer, European nationalist, etc. (Any others mentioned by class may be included in this list.)
5. Have students make a chart showing how careers in Europe were influenced by colonization of Africa. (May take form in interdependent maps or charts).
6. Set up a role playing situation. Set up a discussion in which students portray roles of those related to colonization or those who might oppose it. These may include (but not necessarily be limited to):
    - army officer
    - tax payer
    - British worker
    - investor
    - manufacturer
    - missionary
    - African tribal chief
    - etc.

   The students will research their own roles and present them to the class. The students will present the views of the person they represent regarding colonization.
7. What new jobs arose when colonies started:
    - Colonial administrator, etc.

Summary

Have students summarize the findings of the lesson:

1. What changes in Europe in the 19th century led to the desire for colonies?
2. How did the existence of natural resources in Africa make it easier for industry to develop in Europe?
3. What people other than industrialists favored the rule of Africa by Europeans?

EVALUATION:

1. Have students list the new careers and occupations that developed in Europe as a result of the Industrial Revolution.
2. Have students answer the following questions with a paragraph:
    - a. How did the colonies aid in the development of industry?
    - b. What jobs or professions unrelated to industry favored the existence of colonies?

Social Studies (The Study of Africa) - Grade 9
"Careers Needed in Westernization of A Nation"
Lucy Becker

CURRICULUM CONCEPT:

To understand the chnages that European nations made in Africa.*

RELATED CAREER EDUCATION CONCEPT:

To understand what careers are needed to westernize a nation.

THEME AND OBJECTIVES

Themes	Objectives
Skill Competency	The student will produce a blueprint for colonizing an area.
Career Awareness	The student will describe the jobs and careers needed to run a colony.
Educational Awareness	The student will describe the method of training people to fill the needed positions.

ACTIVITIES:

Introduction

(Note: This project must be set up by the teacher in conjunction with the school librarian. The tasks of the students will be worked out and may vary according to the level and the needs of the class.)

Explain to the students that they will be exploring the idea of what careers are necessary to westernize a nation. This is important because those involved have shaped the destiny of a very important area of the world. It is also important because the mistakes made by those in charge of the colony created many problems that must be faced by us today.

Tasks

1. Set up the following situation with the class:
   "You have been chosen as the colonial administrator of an African area by your country. The area over which you will rule is totally uninhabited by Europeans and so far has been totally untouched by Western influences. It is your job to establish a colony and begin to develop the resources of the area. You may use any person that you feel is necessary and any funds needed will be provided by your country."

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*The curriculum concept is found in the book, The Afro-Asian World: A Cultural Understanding, Edward Kolevzon, Boston: Allyn and Bacon, Inc., 1966.

2. Have the students research in the library to determine careers that will be needed to perform a specific task. ex: building a road, opening a mine, etc.
3. Each student will produce a finished product which may take the form of a written report, a chart for display, a series of drawings, a diagram, accompanying a report, etc. This product will contain the changes that the person would make in the colony and type of people, i.e., careers and occupations that they would need.

Summary

Have students summarize the lesson by considering the following:

1. What changes would a colonial administrator make in a colony?
2. What specific careers would be needed to begin to develop a colony?

EVALUATION:

1. The teacher will check the product turned in by the class.
2. What jobs will be necessary to run your country? (Respond with 100 words or less).
3. How would you train both the natives and the Europeans to run your country? (Write an answer in 200 words or more).

Social Studies (The Study of Africa)- Grade 10
"The Role of Africa Today"
Lucy Becker

CURRICULUM CONCEPT:

To describe the role of Africa in the World Today.*

RELATED CAREER EDUCATION CONCEPT:

To understand careers which must be developed in an emerging nation.
To understand the economic importance of Africa in the world today.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student will list careers that are needed in a developing nation.
Economic Awareness	The student will name products which we in the U.S. obtain from Africa.
Career Awareness	The student will describe what it would be like to be a worker in Africa today and compare this to his knowledge of workers in the United States.

ACTIVITIES:

Introduction
(Note: This lesson will follow a series of lessons in which the class will explore the movement towards independence in Africa. The ways in which the various colonies actually achieved independence will be studied.)

1. Draw on students previous knowledge to elicit the careers that were needed to establish colonies in Africa.
2. Ask students to recall the previously shown film Africa in Ferment which focused on the occupations and problems as well as the importance of Africa in the world today.
3. Ask, "What is the importance of Africa to us today?"

Tasks

1. Have students pick an African nation and do research on the various careers needed by that nation to function as a modern nation.

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*The curriculum concept is found in the book, The Afro-Asian World: A Cultural Understanding, Edward Kolevzon, Boston: Allyn and Bacon, Inc., 1969

2. Have students research products which are produced or which may be produced in the future by that nation. They are to discover the way in which that product influences us in the United States (i.e. why it is necessary for our industry, etc.)
3. Role play the following situation a)Some student will play the role of a worker in an industry in an African nation. He will draw upon the knowledge he has acquired in his World of Work course and English class in which he will be learning about work in this nation. He will cover such things as pay, life style, need for a union, working conditions, etc.

   b) Some members of the class will play the role of U.S. workers whose jobs rely on the raw materials from Africa (i.e. diamond polishers, jewelry craftsman, etc.) They will cover the same aspects listed above with special emphasis on how their lives are influenced by the developments in Africa.

Summary

Have students respond to the following:

1. What careers must be developed if African nations are to become productive members of the modern world?
2. How do careers now being developed in Africa influence business and industry in the United States?

EVALUATION:

The students will fill in the following chart for emerging African nations·

CAREERS NEEDED	CAREERS BEING DEVELOPED NOW

INFLUENCE ON U. S. JOBS

Social Studies (The Study of the Soviet Union) - Grade 9
"Creating a Soviet Newspaper"
Lucy Becker

CURRICULUM CONCEPT:

To understand the life of people in the Soviet Union.*

RELATED CAREER EDUCATION CONCEPT:

To create a sample newspaper and to learn the career's associated with it.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	The student will demonstrate the various jobs associated with producing a newspaper.
Skill Competency	The student will identify those aspects of a Soviet newspaper which differ from our newspaper.

ACTIVITIES:

Introduction

(Note: This lesson will introduce an on-going project which will be of several weeks duration. Allow class time at regular intervals to check the progress of the students and to aid them in their work. The project may be made more or less sophisticated depending upon the level of the class. This project will coincide with a series of lessons in the students' English class in which they will explore the component parts of a newspaper. As a culmination of their English work, the class will have taken a field trip to the New York Times.)

This lesson will follow the introductory lesson "Why do we study about the Soviet Union?"

1. Based on the previous knowledge of the class, the teacher and class will list the component parts of an American newspaper.
2. If possible the teacher will show the class a copy of a Soviet newspaper. Despite their inability to read the language the class should be able to identify what aspects of a U.S. newspaper are not included.

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*The curriculum concept is found in the book, The Afro-Asian World: A Cultural Understanding, Edward Kolevzon, Boston: Allyn and Bacon, Inc., 1969.

(i.e. advertising being the most outstanding example.) Ask the class why there is no advertising in a Soviet newspaper. If no one in the class knows, this may be assigned as a task to one person. Tell the class that they will be producing a newspaper which will be distributed to the class and possibly to other classes of the same grade as well.

Tasks

1. The teacher and the class will list together the various parts of a Soviet newspaper. These may include: news, editorials, sports, cultural events, "city news," education, etc.
2. The students will each choose the area on which they would like to work.
3. The teacher will arrange one or more library lessons for the class in which they will do research on their assigned topic. Students may also do interviews and may employ other means of gathering information.
4. Members of each group will be assigned the role of editors, layout men, typists, etc.
5. After preliminary work is completed, a group of students will be appointed to serve as government censors. The role of the censor and therefore the function of the press will be contrasted with the free U.S. press.
6. After the newspaper is completed the class may investigate various methods of reporduction and distribution to other students.

Summary

1. Ask the class what they have learned about the production of a newspaper.
2. What have you learned about the differences between a U.S. newspaper and a Soviet newspaper?
3. What specific facts have you learned about the Soviet Union (i.e. about the position of the performer, the athlete, the government official however.

EVALUATION:

1. The finished newspaper product will be evaluated by the teacher to see how well the students have performed their assigned tasks.
2. Ask students to list three distinctions between a Soviet newspaper and one found in the United States.

Social Studies (The Study of the Soviet Union)- Grade 9
"The Influence of Geography on Occupations"
Lucy Becker

CURRICULUM CONCEPT:

To describe the geographical features of the Soviet Union.*

RELTAED CAREER EDUCATION CONCEPT:

To explain how geographical features of the Soviet Union influence the occupations of the people?

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student will assess the influence of geography upon careers.
Career Awareness	The student will list the careers that exist in the Soviet Union.
Career Awareness	The student will compare the careers influenced by geography in the Soviet Union with the careers that are influenced by geography in the U.S.

ACTIVITIES:

Introduction

(Note: Prior to this lesson the class will have spent several days studying the geography of the Soviet Union. Included in the study will be the topography, the climate, and the resources.)

Review with the class the importance of the Soviet Union and the way in which the geography has influenced its development. Ask: "How has the geography of the Soviet Union influenced the type of occupations that exist?" Why is it important for us as Americans to understand the relationship between geography and occupations in the Soviet Union?

Tasks

1. Distribute a copy of the map "Industries in the Soviet Union" (Social Studies Grade 9, Curriculum Guide p. 322) and a climate map of the

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*The curriculum concept is found in the book, The Afro-Asian World: A Cultural Understanding, Boston: Allyn and Bacon, Inc., 1969.

"The Influence of Geography on Occupations"

USSR (This may be one that the students have made by themselves.)

2. Have students study the two maps and then answer the following questions:
    a. In what climate zone of the Soviet Union are most of the industries located?
    b. What jobs do the people probably have in these areas?
    c. With what part of the United States may this be compared?
    d. If you were a Russian what industries would you like to see added to this map? (more consumer products is the major lack.)
3. Have students consider the following: If you were a farmer growing wheat which region would you find most suitable? Suppose you were growing cotton, citrus fruits, etc. - in what areas would you settle?
4. For each of the climate zones of the Soviet Union complete the following chart:

	Occupations	Clothing	Types of Houses
1. Tundra			
2. Taiga			
3. Steppe			
4. Desert			
5. Humid			

(Social Studies - Grade 9, Curriculum Guide, page 327)

5. Have students plan a trip across the Soviet Union. What part time job could you hope to get as you progressed in your travels? How would you expect that the life styles would changes as you travelled?
6. Show class resource map of the Soviet Union. What areas of the Soviet Union which are rich in resources do not have many industries? Why? (Siberia an extremely cold area has many untapped mineral reserves, yet few people and industries.)
7. Have students imagine the following: Suppose you wanted to develop an industry in this area. What problem would you face? What type of experts would you have to take with you? How would the life styles of the people differ from yours?
8. Have students make a drawing or a diagram showing a developing community in the Soviet Union.
9. Ask students to imagine the following situations:
    a. You are developing an industry in the extreme north of the Soviet Union;
    b. You are employed in a trade capacity in the region of the Pamir Mountains; etc.

Teacher will select other areas for example where the climate and/or topography are difficult.

The students will be asked to:
- a. decide what industry they would start;
- b. anticipate the problems that they would face;
- c. what type of occupations would they want to have in their community;
- d. how would they solve their problems.

Summary

Summarize the activities with these three questions:

1. What problems does the Soviet Union face in utilizing their resources?
2. Why are the climate and topography considered unfavorable?
3. Why are certain areas of the Soviet Union better suited to some careers than others.

RESOURCES:

Climate, resource and topographical maps of USSR.

EVALUATION:

Write a half page answer to the following:

1. How does the geography influence the careers that exist in the Soviet Union?
2. What problems are faced in fully utilizing the resources of the Soviet Union?
3. List twenty careers that in the Soviet Union.
4. List three different careers in the Soviet Union which are not found in the United Staes which are a function of geographic constraints.

Social Studies (The Study of the Soviet Union)- Grade 9
"How Peter the Great's Changes Brought New Careers"
Lucy Becker

CURRICULUM CONCEPT:

To describe how Russia became a more Westernized nation.*

RELATED CAREER EDUCATION CONCEPT:

To explain what career and personal characteristics characterize a person or nation as "Western."

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	The student will identify those aspects of our life which make us "Western".
Attitudes and Appreciations	The student will distinguish between "Western" and "Non-Western" civilizations.
Career Awareness	The student will describe what new jobs had to be created to transform Russia from a "Non-Western" to a "Western" nation.

ACTIVITIES:

Introduction

(Note: This lesson is one in a series exploring the history of the Soviet Union from its founding to the present. This lesson is to be taught chronologically following a discussion of the development of the strong Czars in Russia in the 17th century.)

1. Ask the class how they describe a person. Elicit from class description of personal characteristics, of occupation, etc.
2. Show the class pictures of people from different clutures (including African which was just studied) and the concepts of "western" and "non-western" will be explored.
   "Why do many people in the world want to adopt western ways? The transition will then be made to a study of Peter the Great, who tried to impose the standards of western society on Russia.

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*The curriculum concept is found in the book, The Afro-Asian World: A Cultural Understanding, Edward Kolevzon, Boston: Allyn and Bacon, Inc., 1969.

"How Peter the Great's Changes Brought New Careers"

Tasks

1. Have students list the things about themselves that they feel are most important. (These characteristics may be those which the student has discovered in his "World of Work" course.)
2. Ask students what about themselves or their daily lives characterizes them as a "western" person.
3. Have students describe the typical Russian in the year 1700. (The student may draw upon readings in his textbook, the material on page 341 in the Social Studies - Grade 9, Curriculum Guide, or in his independent readings.
4. Students with artistic ability may draw a picture of a Russian before and after the changes introduced by Peter the Great.
5. Students will list the typical means of making a living in Russia before Peter's changes.
6. The class will discuss, "Why did Peter want to make certain changes in Russia?" "How did he become exposed to the things he wanted his subjects to know?"
   (The class will be made aware of the fact that as heir to the throne, Peter travelled extensively throughout Europe, held a variety of jobs and lived in different areas to learn the ways of the people).
7. What changes did Peter introduce in Russia? What new careers developed as a result of these changes?

Changes	Careers
a. changes in style of dress	a. sheep growing, weaving of cloth, factories for making clothes.
b. change in alphabet	b. increased printing, more literacy for various uses, newspaper careers
c. start of large army and navy	c. smelting, mining, munitions making
d. making people "look western" (shave beards, wear western clothes, smoke, etc.)	d. tax collectors (taxes had to be paid to wear beards), tobacco industry, etc.

   (Note: The above are given just for illustrative changes - Many more changes can be found and handled in the same manner.)

8. Ask the class what new careers have been developed by changes in our society. Such things as careers stemming from increased attention to men's appearance, etc. - hair stylists, clothes stylists, etc, may be discussed as well as careers stemming from new industries such as the aero-space industry.
9. Some members of the class may put on a skit dramatizing some of the changes made by Peter the Great in Russia.

"How Peter the Great's Changes Brought New Careers"

Summary

Have students cluminate their learning by asking:
1. Why did Peter want to make certain changes in Russia?
2. What were some of the changes that he made?
3. How did these changes lead to new careers?
4. Why do you think he is known as "Peter the Great?"

RESOURCES:

New York City Curriculum Guide
If possible - pictures of people representing different cultures, etc.

EVALUATION:

1. The student will prepare a composition that will cover the following points:
    a. Distinguish between the appearance, life style and probable careers of a western and non-western person.
    b. Describe at least three changes made by Peter the Great in Russia and explain how each represented an attempt to make Russia a western nation.
    c. Describe the new careers that this created.

Social Studies (The Study of the Soviet Union)- Grade 9
"Life Styles and Revolutions"
Lucy Becker

CURRICULUM CONCEPT:

To describe the causes of the Russian Revolution of 1905.*

RELATED CAREER EDUCATION CONCEPT:

To describe how peoples desire for better working conditions and an improved life style lead to revolution.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	The student will state the reasons people have tried to attain better life styles.
Career Awareness	The student will state the problems faced by Russian workers during the 19th century.
Economic Awareness	The student will compare the situation in Russia in the 19th century with the situation in the U.S. today.
Attitudes and Appreciations	The student will describe the role of the intellectual (writer and speaker) in bringing about change.

ACTIVITIES:

Introduction

(Note: This lesson is to be taught chronologically within the curriculum following lessons on the czars of the 19th century and the inability of reform movements to solve the problems of the Russians in the 19th century. The class should have explored the great difficulty the Russian people had in trying to solve their problems.)

Put the following statement on the board. "The Russian Revolution of 1905 was the result of many centuries of discontent." Ask the class why the people of Russia were discontented. This will lead to a transition to the main body of the lesson--the dissatisfaction with basic life styles that led the Russian people to revolt.

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*The curriculum concept is found in the book, The Afro-Asian World: A Cultural Understanding, Edward Kolevzon, Boston: Allyn and Bacon, Inc., 1969.

Tasks

1. The teacher and class will list together those aspects of life which make life worthwhile. Separate lists will be compiled for a factory worker and a farmer.

   These lists may include some of the aspects listed below:

FACTORY WORKER	FARMER
1. leisure time	1. ability to own land
2. good working conditions	2. ability to sell products for a profit.
3. enough pay to provide necessities and some pleasure of life, etc.	3. ability to provide for one's family

2. The students will explore the lives of a typical Russian factory worker and a typical Russian farmer in the early 20th century. The deficiencies in their lives will be explored and an attempt will be made to point out which factors made their situations unbearable. Factors to discuss include child labor, the effects of the industrial revolution, horrible working conditions, fact that farmers did not own their own land, etc.
3. Ask students to consider who gave these dissatisfied people direction in their channeling their discontent into action. The class will explore the role of the person who influences and molds public opinion. The skills possessed by the writer, the speaker, etc. will be explored. (Students will draw on the knowledge they have acquired in their English and World of Work courses.)
4. Students may prepare speeches in which they appeal to the desires of the factory workers for a better way of life.
5. Some students in the class may be selected for special reports about writers and speakers today who influence public opinion. These students may also list the various careers in which this type of persuasion would occur. These might include editorial writers, politicans, lawyers, etc.
6. Some students may be selected to explore the lives of factory workers and farmers in the U.S. today. Students may interview a member of their family or a friend who works in a factory.
7. If possible a field trip may be arranged to a nearby factory. Students will be briefed before the trip about questions that should be asked regarding working conditions, benefits, etc. In a report following the trip the students will compare the life of the American factory worker now compared to that of the Russian worker in the early 20th century.

Summary

Ask students for what reasons a person would take extreme action to achieve their goals. What were the conditions of the average Russians in the early 20th century? Who helped them to define their goals? How were these conditions compared to the American workers today?

"Life Styles and Revolutions"

EVALUATION:

Use a half sheet of paper to answer each of the following questions.

1. Define: life style and describe why people want to change their life styles.
2. Describe the life style of a Russian factory worker and a Russian farmer of the early 20th century.
3. How did writers and speakers help to bring about change?
4. How does the life of the factory worker and farmer in the United States today differ from that of the Russian equivalent in the early 20th century?

Social Studies (The Study of the Soviet Union)- Grade 9
"Effect of Communism on Careers"
Lucy Becker

CURRICULUM CONCEPT:

To explain the basic ideas of communism.*

RELATED CAREER EDUCATION CONCEPT:

To describe how the Communist system influences business and career choices.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student will list jobs which do not exist under the communist system.
Economic Awareness	The student will explain the ways in which communist ideas about business differ from capitalist.
Economic Awareness and, Attitudes and Appreciations	The student will describe the role of the government in industry in the communist system and be able to compare it with the role of our government.

ACTIVITIES:

Introduction

(This lesson will follow one in which the class has studied the basic ideas of Karl Marx, their implementation in Russia and the reasons why it was impossible to put the theory of Marx's ideas into practice.)

Review with the class the importance of the Soviet Union in the world today. Point out to the class that they have been conditioned to think of Communism as "bad" often without much understanding of what Communism is in practice. The class will then explore the need for increased knowledge about the communist economic system.

Tasks

1. Class may view the filmstrip Economic Life in the Soviet Union. After

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*The curriculum concept is found in the book, The Afro-Asian World: A Cultural Understanding, Edward Kolevzon, Boston: Allyn and Bacon, Inc., 1969.

viewing the film, the class will list the main points of the film. These include the following: government ownership of industry, concentration on heavy industry, etc.

2. Class will construct a chart comparing the Soviet Economic System and the U.S. Economic System:

SOVIET	UNITED STATES
a. Government owns all industry	a. Private ownership--some government regulation.
b. Government sets wages, prices, production quotas, etc.	b. Wages, prices, etc. set by supply and demand, private negotiations, etc.
c. Only one product of a kind--no competition, no advertising.	c. Competition among various producers- great variety of products, advertising.

etc.--Other comparisons may be made as well.

3. What are the advantages and disadvantages of the Soviet system as far as the Soviet people are concerned? (Advantages--discuss things as free medical care, no unemployment, contrasted with disadvantages--limited choice of consumer goods, inferior quality, etc.)
4. What jobs would not exist in a Communist system? (Advertising executive, commercial artist, owner of small store, ability to be self-employed in any area.)
5. In what areas would additional jobs be created? (discuss greatly increased number of government jobs--increased bureaucracy that would exist.)

Summary

1. In what way does the Communist attitude towards business differ from the capitalist idea?
2. What differences in jobs exist between the two societies?

EVALUATION:

1. Explain the attitude of the communists regarding the ownership and regulation of business.
2. Which jobs exist in a captialist economy that do not exist in a communist society.
3. Explain a) advantages and b) disadvantages of the communist society.
4. List four jobs which do not exist under the communist system.

American History - Senior High
"The Relationship Between One's Value System and Career Choice"
Lucy Becker, Ken Tewel, Robert Klein

CURRICULUM CONCEPT:

To understand how social mobility had changed between the great depression (1929) and the present.*

RELATED CAREER EDUCATION CONCEPT:

To explore and analyze one's own value system and temperament as related to possible career choice.

THEMES AND OBJECTIVES:

Themes	Objectives
Self Awareness	The student will identify those values important to him.
Self Awareness	The students will name three of their values, needs and skills.
Career Awareness	The students will list three specific career opportunities they believe will be available to them.

ACTIVITIES FOR SESSION ONE:

Introduction

Devise a checklist of various careers and occupations.(instructor developed) Have students check off those careers or occupations which they feel may be open to them regardless of status or class.

Tasks

1. Have student list those obstacles to the jobs he feels block his way to obtaining a particular job.
2. Have class analyze how to overcome those obstacles and to ascertain which obstacles are difficult if not impossible to overcome. Which would they not want to overcome?

Summary

None provided.

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*The curriculum concept was found in the teacher's notes.

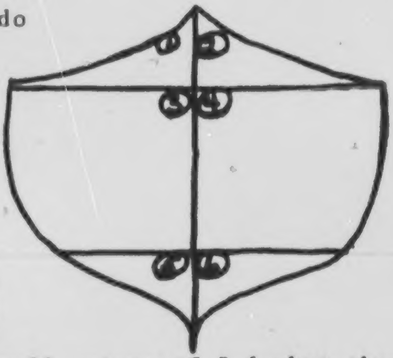
ACTIVITIES FOR SESSION TWO:

Introduction

Since todays activity is in the affective domain no purpose should be discussed.

Tasks

1. Teacher should distribute "coat of arms" game with following instructicns. Without concern for artistic results, fill in the 6 areas of the drawing to make your own coat of arms.



   1. Draw 2 things you do well
   2. Draw yourself earning money in some way.
   3. Draw yourself doing something that gives you happiness
   4. Draw 3 people whose shoes you would like to fill.
   5. Select 3 words you wouldn't like said about you
   6. Select 2 words about you that you would like said about you

2. Students analyze in small groups of 5-6 what they have learned from each other. (Note: students should exchange coat of arms and list what values are evident from their partner's responses).

Summary

None provided.

ACTIVITIES FOR SESSION THREE

Introduction

Select passages from Hard Times by Studs Terkel. Students will read and determine:

- a. What life was like during the Great Depression (1929).
- b. What was it like to get a job during the depression.
- c. Compare conditions during depression and present society (in terms of work opportunities available).

Tasks

Have each student take his lists of :

- a. obstacles to certain employment
- b. their values
- c. difficulties in obtaining a job today.

and formulate 3 jobs they feel they would be happy and successful at.

Summary

Summarize the activities and objectives for the three days.

RESOURCES:

Hard Times by Studs Terkel.
Coat of Arms game

EVALUATION:

1. Give student form (devised by teacher) which has questions such as Why I think I qualify; my skills are; why I believe I will be successful for a particular job.
2. Have students identify 2 values which are important to him, as well as 2 needs and 2 skills all of which could be enhanced by a career choice. Have them descirbe the rationale for this judgement.

LAW IN AMERICAN SOCIETY

LESSON/UNIT TITLE	AUTHOR (s)	# OF LESSONS
Developing Decision Making Skills	Robert Klein	1
Respect for the Law: Is it the Same for Everyone	Robert Klein	1
Game Without Rules	Robert Klein	1
Acquiring Knowledge of the Legal Profession	Robert Klein	1
Acquiring Knowledge about the Journalism Profession	Robert Klein	1
Understanding the Activities of a Classroom	Robert Klein	1
Various Occupations Associated with Law Enforcement	Robert Klein	1

Law in American Society - Senior High
"Developing Decision Making Skills"
Robert Klein

CURRICULUM CONCEPT:

To acquaint the student with reasoning, interpretive and argumentative skills.*

RELATED CAREER EDUCATION CONCEPT:

The student will be able to identify various sets of facts that can support his decisions.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	1. The student will be able to present simple legal arguments
Educational Awareness	2. The student will identify the components of the capitalistic system.

ACTIVITIES:

Introduction
Note to teacher: This is a true story to be related to students as is.)

The year was 1900. The place was a small town in Minnesota. In this small town were one banker and one barber. These two men were close friends. One day the banker, for some reason, declared that he was going to put the barber out of business. This was done in front of witnesses.

One month passed and a second barber arrived in town. This barber set up a new barbershop and charged half the price of a haircut. But the townspeople remained loyal to the first barber and continued to patronize his barbershop.

Shortly after, the banker made it known that anyone who continues to go to the first barber would not receive any new loans, or have their old loans renewed. At this point the first barber loses almost all of his clientele.

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* The curriculum concept is found in the teacher's notes.

Tasks

The teacher should lead a discussion to bring out the following points.

1. What can the first barber do in this case?
2. What can you ask a court of law to do for you? (Define injunction; suit.)
3. Who are the groups involved in this problem?

(Divide the class into 3 groups)

1. As plaintiff's lawyers (define plaintiff), what would you try to prove?
2. As defendant's lawyers (define defendant), how might this group defend the banker?
3. The third group acts as judges to determine, after hearing all arguments, the decision. The decision was 3-2 in favor of the barber.

(Note to teacher: To understand the actual legal decision, the following should be elicited through teacher questioning.)

American capitalism is based on:
- a. competition
- b. private ownership
- c. free enterprise
- d. individual initiative and know how
- e. profit

RESOURCES:

Barber and banker story is an actual legal decision from the state of Minnesota.

EVALUATION:

1. Which component of the capitalistic system did not exist in the barber-banker situation?
2. How might the plaintiff prove this?

Law in American Society - Senior High
"Respect for the Law: Is It the Same for Everyone"
Robert Klein

CURRICULUM CONCEPT:

To understand the law and its many related fields.*

RELATED CAREER EDUCATION CONCEPT:

The American legal system has a significant affect on our value system.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	1. The student will identify what a system of values is.
Attitudes and Appreciations Self Awareness	2. The student will distinguish between his stereotyped images of the law and the reality of the law.
Attitudes and Appreciations Self Awareness	3. The student, given an understanding of the complexities of the law, will identify his stereotypes and their sources.

ACTIVITIES:

Introduction

Teacher will distribute a questionnaire to students with instructions to answer each of the twenty-three statements by agreeing or disagreeing. This questionnaire offers statements concerning the courts, police, value judgments and the legal profession.

Tasks

After students finish answering the questionnaire, the class will then go about analyzing their choices as well as the language and significance of the statements.

Emphasis should be placed on eliciting from students why they have come to their individual conclusions; what prior knowledge, concerning the law, do they bring to the class with them; how does the law affect the individual student's system of values.

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* The curriculum concept is found in the teacher's notes.

"Respect for the Law: Is It the Same for Everyone"

(Note to Teacher: On attached questionnaire, stress the following statements - 1, 8, 10, 11, 12, 15, 16, 19, 22, 23. Emphasis on 1, 8, 11, 22, 23 for career education.

Summary
Students should be able to verbalize their own value system to the extent that they show an awareness of right and wrong. As students describe their own values, the teacher should propose a list of careers and ask students to see what career their values would coincide with or conflict with.

RESOURCES:

Questionnaire taken from an article entitled "Cops Versus Kids: Respect for Law", by David M. Rafky, Edward Thibaul and Roy D. Pinsky, found in an issue of New York State Council for Social Studies, January 1972.

EVALUATION:

The student will develop the following idea: as the leader of a mythical nation, establish a system of values and priorities for your country: a comparison between students' work can be made to demonstrate those values that are most desirous.

Law Questionnaire*

ITEM	AGREE	DISAGREE
1. The law protects property rights at the expense of human rights.		
2. A person should obey only those laws that seem reasonable.		
3. It is all right to evade the law if you do not actually violate it.		
4. The sentences of judges in their courts are determined by their prejudices.		
5. On the whole judges are honest.		
6. Juries seldom understand a case well enough to really make a just decision.		
7. On the whole, policemen are honest.		
8. A man should obey the laws no matter how much they interfere with his personal ambitions.		
9. Court decisions are almost always just.		
10. In the courts a poor man will receive as fair treatment as a millionaire.		
11. Personal circumstances would never be considered an excuse for breaking the law.		
12. A man should tell the truth in court regardless of the consequences.		
13. A person who reports minor law violations is only a trouble maker.		
14. A person is justified in giving false testimony to help a friend.		
15. A hungry man has the right to steal.		
16. All laws should be strictly obeyed because they are laws.		

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* Taken from "Cops Versus Kids: Respect For Law", by David M. Rafky, Edward Thibaul and Roy D. Pinsky, found in an issue of New York State Council for Social Studies, January 1972.

ITEMS	AGREE	DISAGREE
17. Laws are so often made for the benefit of small selfish groups that a man cannot respect the law.		
18. Almost anything can be fixed up if you have enough money.		
19. It is difficult to break the law and keep your self-respect.		
20. On the whole, lawyers are honest.		
21. Violators of the law nearly always are detected and punished.		
22. It is all right to break the law if you do not get caught.		
23. An honest, law-abiding individual will succeed in any career.		

Law in American Society - Senior High
"Game Without Rules"
Robert Klein

CURRICULUM CONCEPT:

Society like any profession or career, must provide rules or regulations to function.*

RELATED CAREER EDUCATION CONCEPT:

The student will recognize that with accepting responsibility one must also adhere to certain necessary rules or standards to complete his task.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	1. Students will be able to describe why rules or "laws" are essential to any career or society.

ACTIVITIES:

Introduction
"Game Without Rules"
1. Give each student a cotton ball.
2. Game begins. Each student has 60 seconds. (Note to teacher: No further instruction given.)
   Teacher asks after 60 seconds, "Who won?"
3. Because of student confusion, teacher agrees to give the rules of the game.

Tasks
Teacher divides students into four rows - First person in each row holds the cotton ball.

Teacher instructs each team to pass the cotton ball to the person behind you on his command. As soon as game starts, teacher stops it abruptly. (Note to teacher: After each stopping of the game, add one new rule until the students are sufficiently confused.)

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* The curriculum concept is found in the teacher's notes.

"Game Without Rules"

Teacher should discuss with students the results of a "game without rules" - elicit the problem that arises without rules: who makes the rules. All players must understand the rules. (Why?) With rules you have some direction; conclusion of the game (should there be?).

Summary
Teacher led discussion to answer the following questions.
As an employee in any career, what are the rules or standards one must follow? e.g. productivity, punctuality, appearance, interpersonal relationships, quality of work.

RESOURCES:

"Game without Rules"
Lincoln Filene Center for Citizenship and Public Affairs.

EVALUATION:

Selecting any career of the students' choice, he will describe the rules or standards generally accepted for that career.

Law in American Society - Senior High
"Acquiring Knowledge About the Legal Profession."
Robert Klein

CURRICULUM CONCEPT:

To understand that the courtroom is like the theater, with the participants very much like actors in a play, constantly interacting and affecting each others work.*

RELATED CAREER EDUCATION CONCEPT:

1. The student will acquire an understanding of the variety of careers in the legal profession as well as their various life styles.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will identify the various careers available in the legal profession.
Educational Awareness	2. The student will identify the educational skills and levels needed for each career.

ACTIVITIES:

Introduction
The teacher should elicit from students those individuals ("actors") who make up the courtroom drama. Judge, lawyers, jury (critics), plaintiff vs. defendant witnesses, court reporter, bailiff, gallery.

Tasks
After discussing the purposes and function of the various participants in a courtroom, ask students to identify the various careers available through the courts;

A. Judges
B. Law clerks
C. Lawyer (Private - legal aid) - District Attorney
D. Legal secretaries; private investigators.
E. Court reporter
F. Stenographers

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* The curriculum concept is found in the teacher's notes.

"Acquiring Knowledge About the Legal Profession."

Tasks

G. Bailiff
H. Court employees to interview perspective jurors
I. Clerks and file clerks who keep and compile all court proceedings.
J. Probation Officers
K. Bail Bondsman

Summary
After listing all the careers available through the courts, have students discuss the educational skills and levels needed to meet the requirements for such a career.

RESOURCES:

Field Trip - Teacher can schedule a visit to any court in the New York City area.

EVALUATION:

1. Student will list eight careers associated with the legal profession.

2. Student will describe, in detail, the educational achievement need for each of the careers he listed above.

Law in American Society - Senior High
"Acquiring Knowledge About The Journalism Profession"
Robert Klein

CURRICULUM CONCEPT:

To understand that a free press plays an essential role in a democratic society.*

RELATED CAREER EDUCATION CONCEPT:

The student will understand that the press has a direct affect on the life styles of many individuals.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. The student will explain the different functions of a newspaper. 2. The student will identify the various occupations found in the media.

ACTIVITIES FOR SESSION ONE:

Introduction
Teacher should direct students to bring to class newspapers; different types of newspaper besides the daily newspaper can serve as examples (e.g. underground, weekly papers--Village Voice--, union papers, newspaper devoted to specific topics--Music, Rolling Stone .

Tasks
Teacher should have students examine the newspaper they have selected to discover the various functions a newspaper performs. E.g. information, editorials, entertainment, sports, advertisement, art, reviews. Special interest articles found in underground papers designed to change opinions. A discussion of the difference between underground and overground papers should take place.

Summary
Review the activities and discussions for the day.

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* The curriculum is found in teacher's notes.

"Acquiring Knowledge About the Journalism Profession"

ACTIVITIES FOR SESSION TWO:

Introduction
Once again discuss with the class the different functions of a newspaper as well as the various occupations associated with the media.

Tasks
The teacher can set up a situation where the class will attempt to establish a newspaper. The problem is to determine what types of career people are needed to develop a successful staff: Responses: journalists, editors, printers, proof-readers, reporters, photographers, distributors, advertisers, copy boys, clerk, secretaries, typesetters. The follow-up to this lesson would concern itself with a particular situation involving the press and the public's "right-to-know." E.g. Watergate, Pentagon Papers, John Peter Zenger.

Summary
The teacher can ask the students to take up any of the various occupations in the newspaper industry and determine what the task or responsibility that person has in producing a finished product.

RESOURCES:

A trip to any newsroom can be planned, either as an introduction or reinforcement for this lesson.

EVALUATION:

1. The student will list ten functions of a newspaper.

2. The student will list ten occupations associated with the newspaper.

Law in American Society - Senior High
"Understanding the Activities of a Courtroom"
Robert Klein

CURRICULUM CONCEPT:

To understand the working procedures of the judicial system.*

RELATED CAREER EDUCATION CONCEPT:

The student will understand the decisions and activities of those individuals involved in a courtroom scene.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	1. The student will construct the legal arguments, evidence and conclusions for their respective roles in the courtroom.
Career Awareness	2. The student will be able to identify the various responsibilities of legal careers.

ACTIVITIES:

Introduction
(Note to teacher: This lesson should follow directly after number 4 as a reinforcement to the careers available in the legal profession.)

Students should read the one-act play in Law; You, the Police and Justice (pages 61-63) entitled: "What should you do when a policeman makes a mistake."

This one-act play is designed to raise the question of a citizen's conduct when faced with a false charge from a policeman. From this situation, the class can construct the courtroom scene based on the problem that the one-act play brings forth.

Tasks
(Note to teacher: The various roles can be divided among the class so that as many students as possible can participate. e.g. The role of a lawyer can be handled by a group of 3 - 4 students.)

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* The curriculum concept on which this lesson is based is Law; You, The Police and Justice, Scholastic Book Services, New York, 1972

"Understanding the Activities of a Courtroom"

Roles to be filled:
        Judge, jury, defense
Judge, jury, defense and plaintiff's lawyer, defendants (2), witnesses, police officer, bailiff, court clerk.

Roles to be played:

Judge:

In this particular case, judge will make decisions on objections, keep order in the court and insure that this trial progresses to an orderly conclusion. On any legal question that causes some confusion, judge will act as liaison between teacher and trial participants.

Jury:

Depending on size of class, jury can be anywhere from 6 to 12 students, with one individual acting as the foreman. Judge should direct the jury on how to decide on guilt ("no reasonable doubt.")

Lawyers:

Groups of 3-4 students can act as government (plaintiff's) and defendant's lawyer. Each group will gather pertinent information; develop tactics; call witnesses; make opening and closing statements.

Witnesses: (to the incident)

They will react to lawyers' questions. They have to refresh their memories on the all alleged crime (re-read the one-act play.)

Police Officer:

Will react to lawyers' questions. Policeman must be aware of the details surrounding the arrest of the two defendents so he can answer all questions by both lawyers.

Bailiff:

Keeps order in court; ejects any rowdy individuals; introduces judge "Oyez, Oyez .....".)

Court Clerk:

Will try to keep a record of the proceedings.

Students for the conclusion of the period can work on the arguments they will present in this role-playing situation. The next class period can be used to act out the role-playing situation.

"Understanding the Activities of a courtroom."

Summary

1. Evaluate the jury's decision as well as the judge's sentence (if any)
2. Evaluate the various roles to see if the students who played these parts succeeded or failed to fill the needs of the career.
3. Elicit from class those ideas or arguments that failed to arise in this mock-trial.

RESOURCES:

Book entitled: Law; You, The Police and Justice.

EVALUATION:

1. The student will list eight careers associated with the legal profession and give the major responsibilities for each.
2. Given the facts of a case the student will construct the arguments, etc. needed to logically present the case in court.

Law in American Society - Senior High
"Various Occupations Associated With Law Enforcement"
Robert Klein

CURRICULUM CONCEPT:

To understand the attitudes, stereotypes, and views regarding law enforcement officials held by the public.*

RELATED CAREER EDUCATION CONCEPT:

The modern day law enforcement agency incorporates various occupations in the attempt to ensure that all citizens obey the law.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will identify the different careers in law enforcement.
Educational Awareness	2. The student will identify the qualifications necessary for these occupations.
Career Awareness	3. The student will describe the responsibilities and duties associated with careers in law enforcement.

ACTIVITIES:

Introduction

Ask students to write a brief description of their image of a policeman; his responsibilities and tasks as well as the qualifications needed by potential police officers. (This should be done prior to the lesson.) NOTE TO TEACHER: A community resource individual from the public relations department of the local police precinct should be invited to talk on the subject "The Careers Available in Law Enforcement."

Students should be directed to concentrate on determining the division of labor that exists in a modern day police force. (e.g. patrolman-patrolwoman, police specialists detectives , traffic police officers, police laboratory specialists, vice squad, transit police, F.B.I. special agents.

Teacher may want to substitute a questionnaire of his own formulation to study student images of police. This can be used to compare any changes that come about in your evaluation.

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* The curriculum concept is found in the teacher's notes.

"Various Occupations Associated With Law Enforcement"

Tasks

Students should be divided into various groups to determine amongst themselves the qualifications and tasks that each career in the police force would need. The police interview as well as individual research can be used as resources. One member from each group can present the conclusions. (Teacher will have to add to these conclusions, particularly with regard to the responsibilities of each job.)

Summary

Have students make a list of the types of crimes and related police responses that each career in law enforcement comes into contact with.

RESOURCES:

A speaker from the public relations department of any local police precinct.

EVALUATION:

1. The student will list fifteen careers associated with law enforcement.
2. The student will list the qualifications necessary for 10 of the 15 careers listed above.
3. The student will describe the responsibilities and duties associated with each of the careers lised in part 2 above.

ART (REGULAR)

LESSON/UNIT TITLE	AUTHOR (s)	# OF LESSONS
The Construction and Industrial Uses of 3-D Design	Edward Henrion	1
Three Dimensional Design and Related Art Careers	Edward Henrion	1
Creating a Public Service Commercial for TV on Film	Edward Henrion	1
Motion Photography and Animation	Edward Henrion	1
Animated Technology	Edward Henrion	1
Careers and Lettering	Edward Henrion	2
The Graphic Process of Spot Illustration	Edward Henrion	1
Book Cover Design	Edward Henrion	1
Interior Design - Structure and Aesthetics	Edward Henrion Jess Resnick	1

Art - Senior High
"The Construction and Industrial Uses of 3-D Design"
Edward Henrion

CURRICULUM CONCEPT:

To understand and construct a 3-D design.*

RELATED CAREER EDUCATION CONCEPT:

To perceive the methods of 3-D construction in a professional studio and the uses to which these forms are put.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. The student will list different kinds of industries that use 3-D display.
Skill Competency	2. The student will identify and list the different steps taken by a professional studio in constructing 3-D forms.
Career Awareness	3. The student will describe job satisfactions, limitations, necessary preparation, and advancement opportunities given a particular occupational person's task of a professional studio.

ACTIVITIES:

Introduction
The students will be expected to understand the division of labor in a professional display house. The importance of coordinated production should be stressed.

Tasks

1. The student should obtain an overall diagram from the plant manager of different operations or departments.

2. The manager or foreman should be asked to indicate the crucial roles in design construction.

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* The curriculum concept is found in teacher's notes.

3. The class should follow a job from the board to the end product. They should look for the problems peculiar to the boardman.

   (a) What are the conditions under which he works?

   (b) What are his primary considerations in designing a 3-D form?

   (c) To whom does the job go after the boardman?

   (d) What specific task is involved in this and subsequent phases?

   (e) Who assesses the final product?

   (f) What does the student think about the finished product?

4. In each phase or department of 3-D construction, the student should inquire of the worker:

   (a) What do they find rewarding in their job?

   (b) What preparation is necessary to do the job?

   (c) What promotional opportunities are open to them?

Summary

After having followed a 3-D form from its idea to its finish, the student should have gained an overall understanding of the production process. The student should have also gained insights into the specific condition and contribution of each phase or operation in the production of the final product.

EVALUATION:

"Back at the ranch," the student will be asked to list the kind of businesses which use 3-D forms. The student will identify the phases or production steps which led to the final product. The student will be asked to evaluate or comment on the job satisfactions and/or limitations, preparation requirements and advancement opportunities.

Art - Senior High
"Three Dimensional Design and Related Art Careers"
Edward Henrion

CURRICULUM CONCEPT:

To construct three-dimensional design.*

RELATED CAREER EDUCATION CONCEPT:

To understand the many ways in which three dimensional design is used in art related careers.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. The student will list art related careers in which 3D forms are used.
Skill Competency	2. The student will list the materials and tools necessary to create forms as well as describe the advantages and disadvantages of each.
Skill Competency	3. The student will translate a planned design into a 3D form.

ACTIVITIES:

Introduction

The student will be relating this lesson to an earlier lesson in expressive 3D forms. The rationale being, that 3D design is widely used in many different careers of display design and a student who becomes proficient in this form can find deep personal satisfaction and many professional opportunities.

Tasks

1. Elicit from the class a number of art careers which employ 3D forms (i.e. fashion settings, window display, TV and stage set design, advertisement, sales promotion devices, exhibition design, industrial design, architectural model making, etc.)

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* The curriculum concept is found in teacher's notes.

"Three Dimensional Design and Related Art Careers"

2. Alert students to the different probable "life styles" attached to these careers -- the range of possible incomes and location opportunities for such careers.

Examples:

CAREER	PHYSICAL CONDITIONS	LOCATIONS	POSSIBLE EARNINGS
TV set design Theatrical design Display design	Boardman: planner, studio board, frequent conferences, drawing and blue printing	Large urban areas: New York Chicago, San Francisco, Los Angeles, Dallas, Miami, etc.	Boardmen: $12,000 to $20,000.
	Craftsman: Shopman - works with materials, builds and constructs actual forms to specifications.		Shopmen: $10,000 to $15,000.

3. Encourage students to choose a role from among the various careers listed. Have them decide upon one or more 3D forms they wish to design and explain to the instructor and/or class exactly how they imagine the forms would be used.

4. Have the students decide upon a 3D form in one specific area they wish to design. The student will choose the materials and equipment he wishes to use in construction of the form. The student will draw a blue print plan of the form he intends to construct.

5. Demonstrate some of the basic techniques of cutting, folding and joining materials to the class and then have the student construct the form of his design.

Summary

Have students look at themselves in relationship to the chosen role of the activity. How did they feel? After the experience would they like to further investigate that career? Use this device to summarize all concepts of the lesson.

RESOURCES:

Sample plans of a variety of 3D forms.

Photographs of actual models of 3D forms.

"Three Dimensional Design and Related Art Careers"

EVALUATION:

1. The student will describe in a paragraph how he imagines his 3D form would relate to a specific job. (Supporting visuals should be encouraged.)
2. The student will list other possible applications of their 3D forms.
3. The student will describe the materials used, the advantages and disadvantages of such materials.

Art - Senior High
"Creating a Public Service Commercial for TV or Film"
Edward Henrion

CURRICULUM CONCEPT:

To explore and discover principles of design and color.*

RELATED CAREER EDUCATION CONCEPT:

To understand the multiple applications of design and color to TV or film production of a public service commercial.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	1. The student will plan and write the copy for a public service commercial.
Skill Competency	2. The student will design and construct a TV or film set for the commercial.
Skill Competency	3. The student will perform and record the commercial.
Career Awareness and Educational Awareness	4. The student will list at least five distinct jobs which are involved in TV or film commercial production. (i.e., research, copy writing, state set design, color consultant, light consultant, camera technology, drama, graphics.)

ACTIVITIES:

Introduction
Lead a group discussion on the role of commercials in our society. The importance of public service commercials should be emphasized.

Tasks

1. Divide students into groups of no less than three, no more than five students per group. Have each group decide upon a specific commercial they intend to produce and write the script for the commercial.

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* The curriculum concept is found in teacher's notes.

2. Have each group decide upon the settings and props necessary for their production and then construct their set.
3. Have each group rehearse their production, deciding upon who will speak the message.
4. Introduce to the TV or film camera and the proper use of such equipment. Have students run through a final rehearsal, incorporating sound or any special effects.
5. After the production has been filmed and processed, the class will preview the works and critique for (1) originality, (2) clarity, (3) set, (4) professionalism.
6. (Optional) A field trip to a commercial studio to reinforce professional procedures in commercial production would be highly desirable.

Summary

1. Have groups now exchange members and in a three minute contest see how many distinct jobs they can list which are involved in TV or film commercial production (Note: A game-like situation with a prize might provide incentive).
2. Have students review the steps in the preparation of the commercial.

RESOURCES:

Samples of TV and/or film commercials.
Super 8 mm. or 35 mm. camera, film equipment.
Some TV port-o-pac equipment.

EVALUATION:

1. Students will list the steps taken in creating a public service TV or film commercial.
2. Students will list the procedures in determining copy.
3. Students will list the steps in presenting the commercial for filming.
4. Students will list at least five jobs related to the production of TV or film public service commercials.

Art - Senior High
"Motion Photography and Animation"
Edward Henrion

CURRICULUM CONCEPT:

To understand the principles of motion picture photography-film making.*

RELATED CAREER EDUCATION CONCEPT:

To understand how motion photography is simulated by the art of animation.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. The students will list a number of ways in which film animation is used in our society.
Skill Competency	2. The student will design the components necessary to make an animated film.
Skill Competency	3. The student will demonstrate the technology of making an animated film.
Career Awareness	4. The student will discover the job opportunities, salary potential, life style and requirements for a career in animation.

ACTIVITIES:

Introduction

Have students list the many ways in which animation is used in our society. (films, education, commercials, history, training, etc.) Discuss intent of lesson.

Tasks

1. Alert the students to the many different tasks involved in animation. (Idea men, roughers, inkers, technicians, etc.) Also, some indication of the earning possibilities in animation cartooning should be referred to. Have student study large photographs of animation artists at work and (if available) at play.

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* The curriculum concept is found in teacher's notes.

2. Demonstrate to the students the use of acetate overlays in professional animation in contrast to the animated figure forms to be employed in class. Show them a brief animation film made by a previous class, if available. Also show them brief professional animation.

   Have them analyze each film for the perceived parts:
     1. Titles
     2. Character(s)
     3. Story line
     4. Conclusion
     5. Credits

   Have the students compare the two films for the relative strengths and weaknesses.

3. Now have students group for producing their own film. Divide the class into groups of no less than three, no more than five. Have each group decide upon a story line, characters and settings. One or more members of a group will design the titles and credits. One or more members of a group will design and render the setting or backgrounds. One or more members of a group will design the characters or movable parts.

4. Demonstrate to the students the technique of articulating the arms, legs and heads and any other movable parts of the characters or forms.

5. Then students will explain what aspect of professional animation they like, what aspect, if any, they don't like and why.

6. Have the students upon completion of the film choose two possible careers in animation and research that career with respect to job opportunities, salary potential, life style factors and other requirements. This information should be shared with the class.

Summary

None provided.

RESOURCES:

Brief sample animation films, super 8 mm.; samples of previous class work, samples of professional animations.

EVALUATION:

1. The student will list five ways in which film animation is used in our society.

2. The student will identify four components of an animated film, (titles, story line, characters, settings, credits).

3. Evaluate technology skills based on product produced.

4. Give students a career and have them identify probable salary, life styles, factors, etc.

Art - Senior High
"Animation Technology"
Edward Henrion

CURRICULUM CONCEPT:

To understand motion photography - film making.*

RELATED CAREER EDUCATION CONCEPT:

To understand the basic principles of animation technology (super 8 mm.)

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	1. The student will differentiate the animation components of previous lesson for color-value.
Skill Competency	2. The student will demonstrate simulated action.
Skill Competency	3. The student will demonstrate the special use of a super 8 mm. camera in animation.
Skill Competency	4. The student will edit and splice after.
Skill Competency	5. The student will use the dubbing technique on the film.

ACTIVITIES:

Introduction

Tasks

1. Show students animated film wherein the developed motion is even. Direct their attention to the importance of gradual development in animation technology. Introduce the ratio of 1/8" movement per each three or four frames for normal motion; 1/4" movement per two frames for accelerated motion; one or more inch motion per single frame for maximum motion. How students deduce the necessary ratios for slow motion (i.e., 1/16" per three or four frames, etc.)

2. Have students evaluate sample components of a previous animation lesson for color and tonal contrast.

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* The curriculum concept is found in the teacher's notes.

(a) Why should lighter values and contrasting colors be used on moveable parts? (ans: to separate the figures and forms from the background). Set the camera on tripod over the board and adjust diffused lighting.

3. Demonstrate the function of a cable release.

4. Have students begin their own animations.

5. After the film has been processed, demonstrate the use of the viewer, tape and cement splicing techniques.

6. If sound or voice dubbing is desired by the students, demonstrate a simple method of using a cassette tape recorder to "talk, or sound over" the film (as distinct from "sync" - synchronization tapes on 35 mm.).

7. Ask students to evaluate the personal satisfaction factor in film technology in contrast to the creative or graphic side of animation.

Summary
None provided.

EVALUATION:

Students will list at least four components of an animated film (Titles, characters, story line, conclusion and credits). Students will explain or demonstrate (perhaps to another class) how simulated motion is obtained in animation. Students will be tested on film splicing techniques. Assess demonstration skills during the activity.

Art - Grades 9-10
"Careers and Lettering"
Edward Henrion

CURRICULUM CONCEPT:

To understand the importance of 2D design in lettering.*

RELATED CAREER EDUCATION CONCEPT:

To heighten an awareness of creative design in poster art and the wide use of poster art in our society.

To be aware of the many career opportunities associated with lettering.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	The students will demonstrate the ability to analyze some choice samples of poster art for; forms, color, and composition or lay-out.
Skill Competency	The students will construct a hand letter.
Skill Competency	The students will demonstrate the ability to use different color combinations in poster art.
Skill Competency	The student will demonstrate the ability to apply principles of good composition to a finished poster.
Educational Awareness and Career Awareness	The student will identify career areas which use lettering skills.

ACTIVITIES FOR SESSION ONE:

Introduction

1. Compare two posters to discover the stronger points of one over the other or,

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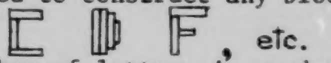
* The curriculum concept is found in teacher's notes.

2. Choose from a number of posters one which they would like to redesign.

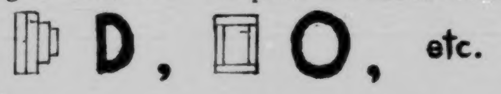
Tasks

1. Having selected a poster for redesign or created a "rough" for their own design. Have students refer to a type face book to identify the name of the face they will be working with.
2. Demonstrate how a few basic cardboard cut-outs can be used to reconstruct any letter of a given face. Example:
   Cut-out (A): can be used to construct any block letter form:
   

   Have students cut out a number of letters in random colors. By placing the letters against a random color background, they will discover that some letters stand off of the background, others don't - become lost in the background color. Students will evaluate which effect is more desirable and why.
3. Have students "rough-out" a redesign or an original design layout. Then have students group-critique the various roughs for
   a. Full use of space
   b. Simplicity
   c. Legibility
   d. Effectiveness of copy (i.e., what the poster is saying).
4. Demonstrate a technique of "pasting up" a letter and then have students complete their designs. Class will critique the finished posters for total effect, expressiveness, and message.
5. Discuss the place of a good poster in a student's portfolio.

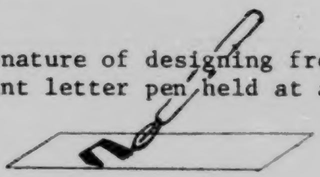
ACTIVITIES FOR SESSION TWO:

Introduction

This session is on hand lettering, pen and brush. Introduce this lesson by asking students to compare a constructed letter with a hand letter.
Example 

Tasks

1. Have students explore the expressive nature of designing free forms with a flat lettering brush, or chisel point letter pen held at a 45° angle to paper ⟶



2. Show to the students the differences between
   a) ROMAN
   b) *Italic*
   c) UNCIAL

   Have students practice a page or two of basic vertical lines and rounds for control and evenness.

   lll OOO, etc.

3 Students will either make up, copy or select copy for a school poster and then will "rough" a layout for a complete design
4 Have the class group critique for a) overall use of surface, b) balance, c) unity, d) clarity, and e) legibility
5. Have students identify various careers which use lettering skills.

EVALUATION:

1. Students will be tested on their choice from among a number of posters the one they like best with supporting reasons being given by them.
2. Students will be asked to construct one or more letters from a given cut-out shape.
3. Students will be asked to identify any two color combinations appropriate for a seasonal poster and explain their choice.
4. Students will be tested on compositional elements of a given poster for balance, unity, and clarity.
5. Students will be asked to identify career areas which use lettering skills.

Art - Senior High
"The Graphic Process in Spot Illustration"
Edward Henrion

CURRICULUM CONCEPT:

To understand the general compositional elements and expressive nature of story illustration.*

RELATED CAREER EDUCATION CONCEPTS:

To become aware of technical consideration in illustrating for reproduction.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. The student will list the many kinds of publications which use spot illustration.
Skill Competency	2. The student will list the steps necessary in reducing an image for graphic use.
Skill Competency	3. The student will perform a "graphic cycle" based upon the special needs of black and white spot illustration.
Career Awareness and Educational Awareness	4. The student will identify a number of art related careers to which this cycle or process is related.

ACTIVITIES:

Introduction
A basic tool of the commercial illustrator is the black and white spot illustration. Spot illustration allows an artist to get work published and widely used. It draws upon a number of disciplines and has many career applications.

Tasks

1. Given a variety of magazines, newspapers, and trade journals, the

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* The curriculum concept is found in teacher's notes.

student can cut out for working reference a number of black and white spot drawings.
2. The student can choose a photograph of a face he finds attractive or identifies with.
3. He will make a small scale drawing (2" x 2") of the face.
4. He will transfer the drawing to a 3" x 3" linoleum block.
5. Following the teacher's instruction, the student will "transfer" the drawing to a small (3" x 3") linoleum block and ink it in.
6. The teacher will make a careful demonstration of how linoleum cutting tools should be used.
7. The student will carve out of the lineoleum block those areas he wishes to remain white (i.e. positive areas).
8. The student will ink the block, following the teacher's demonstration.
9. The student will either hand print or press print the block.

Summary
The students will discuss the kinds of occupations which uses the techniques they have practiced in the lesson activity.

RESOURCES:

The teacher should have a varied collection of simple linoleum cuts and black and white pen, ink, and brush spot illustration.

EVALUATION:

1. The students will list at least four publications that use spot illustration.
2. The student will be tested in reducing an image to ½ size.
3. The student will identify and explain the five components of the graphic cycle (i.e. idea, tracing, transfer, plate, and printing).
4. The student will list five art related careers which can use the graphic cycle.

Art - Senior High
"Book Cover Design"
Edward Henrion

CURRICULUM CONCEPT:

To understand two dimensional design as color and form.*

RELATED CAREER EDUCATION CONCEPT:

To understand two dimensional design as applied to book cover design.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	1. The student will list the components of book cover design (color, design, lettering, illustration).
Skill Competency	2. The student will design a cover for collection of poems or short stories.
Career Awareness and Educational Awareness	3. The student will list five jobs related to book production and cover design.

ACTIVITIES:

Introduction

Lead a class discussion on the importance of book cover design. "How important is cover design in marketing a book?" "What does a good cover design tell us about the book?" "What kind of cover would you put on a book of Man Child in the Promised Land ?, Macbeth ? , The Collected Poems of Edgar Allen Poe ?"

Tasks

1. Show student a number of book jackets. Have students identify the pictorial components of the covers. (Design, lettering, image, color, mood, etc.)

2. Have students select:
   a) short story,
   b) prose selections,

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* The curriculum concept is found in teacher's notes.

c) selected poems,
d) original poems and then "rough out" a cover design which represents:

i) The feeling of the selected copy, mood, etc.
ii) The title of the book, author and publisher in an appropriate face.

3. Have students discuss each other's "roughs" to try to identify the mood or quality of the selections from the cover design.

4. Have the student render his final design and add the title, etc. on an acetate overlay.

5. Discuss the many processes which such a design goes through in order to be printed; listing the different jobs associated with the process. (Color separators, printers, cutters, marketing, etc.)

RESOURCES:

Ample samples of book jackets and covers relating to different kinds of publications. (Sports, mystery, drama, educational, etc.)

EVALUATION:

1. The students will list the components of a book cover design. (Image, mood, color, design, lettering.)
2. The students will list the different kinds of books which employ book cover design.
3. The students will explain how he feels his design expresses his prose or poetry selection.
4. The student will list four career related jobs associated with book cover design.

Art/Mathematics - Senior High
"Interior Design - Structure and Aesthetics"
Edward Henrion, Jean Resnick

CURRICULUM CONCEPT:

To understand the relationship between areas and design.*

RELATED CAREER EDUCATION CONCEPT:

To be aware that decisions in interior design entail both individual structural and individual aesthetic considerations.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness and Career Awareness	Given a specific area and a limited budget the student will design and furnish a den listing the characteristics (size, style, cost, etc.) of each item used and explain each choice.

ACTIVITIES:

Introduction

By playing the role of a new apartment owner who wishes to design a den for his own use, the student will be encouraged by the teacher to make individual lists of items of furniture and decor which he thinks are necessary for his den.

Tasks

1. After sufficient time is allowed for the students to make their lists, the following points should be discussed with the class:
   a) "What is a den?" (Note: after defining a den for the class, the teacher should point out and elicit that different students will have different dens due to varying needs, values, etc.)
   b) "What characteristics must be known about the room?" (Note: After deciding that basic dimensions - length, width, height - are necessary, relate the size question to the actual classroom dimensions.)

2. Discuss the budgeting and financial limitations.

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* The curriculum concept is found in teacher's notes.

3. In light of these considerations, students will again choose furniture to use in "their den". The desired location of individual pieces should be discussed and indicated relating individual furniture size to actual floor and wall space. Areas taken by items of furniture should be computed. Open area should be computed.

4. Style and price of preferred furniture should be discussed. The relative importance of each factor should be seen to be varying from student to student.

5. Style and price of supportive decorations (color, drapes, etc.) should be discussed and also seen to be influenced by individual values.

6. A possible values-clarification exercise could be employed at this point in the lesson of the following type: Tell the class that due to an investment loss, the student will have $500 less to spend on their den. What (piece of furniture, supportive decoration) would they omit and why? This could show each student what item is less important to them and why (cost, use, size, etc.)

Summary

1. Students will construct a model based upon their design.

2. Students will compare their models and rationales.

EVALUATION:

Assess student attainment of objectives by evaluating product produced in lesson.

ART ADVERTISING

LESSON/UNIT TITLE	AUTHOR	# OF LESSONS
Advertising Artists Exist for a Purpose	Eileen G. Davis	1
Art Directors - Interests and Abilities	Eileen G. Davis	1
The Advertising Artist's Studio	Eileen G. Davis	1

Advertising Art - Senior High
"Advertising Artists Exist for a Purpose"
Eileen G. Davis

CURRICULUM CONCEPT:

To understand the purpose of studying.*

RELATED CAREER EDUCATION CONCEPT:

To be aware of the purpose for having advertising artists.

THEME AND OBJECTIVE:

Theme	Objective
Career Awareness	Given a look at the world of advertising art through the eyes of an art director, the student will describe the duties of the advertising art director and the purpose for each duty.

ACTIVITIES:

Introduction

The field of advertising offers many career opportunities for artists. The job of the advertising art director consists of several duties. We shall identify what these duties are, and why they are necessary. The filmstrip "Art Careers in Advertising" will show us an actual work-a-day life of an art director.

Task

1. Have students view filmstrip and write down what the art director does on the job.
2. The following points should be brought out in discussion: See sample chart:

Duty of the Advertising Art Director	Purpose
1. Works with client	To gather information about product to be advertised

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* The curriculum concept on which this lesson is based is found in the book: Careers in the Visual Arts, School of Visual Arts, 209 East 23rd Street, New York City, 1973

"Advertising Artists Exist for a Purpose"

2. Works with copywriter	To arrive at a selling concept
3. Chooses copy and visualization	To provide the best possible visualization for the final print
4. Chooses visual elements for print	Type, placement of photograph, choice of illustrator or photographer is necessary for magazine advertisements.
5. Chooses visual elements for Television	Props, costumes, models and sets are important for selling the product.
6. Works with T.V. Director	Must be sure that original concept approved by the client is carried out.

Summary

We have identified various duties of the advertising art Director and we have discussed purposes for the various duties.

RESOURCES:

Filmstrip: Art Careers in Advertising, Educational Dimensions Corp., Box #488, Great Neck, New York 110022

EVALUATION:

Have students identify 4 duties of the advertising art Director and describe the purpose for each duty.

Advertising Art - Senior High
"Art Directors - Interests and Abilities"
Eileen G. Davis

CURRICULUM CONCEPT:

To identify the basic elements in various work areas of advertising art.*

RELATED CAREER EDUCATION CONCEPT:

To identify how art directors differ in their interests and abilities.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. Given various work areas for art directors, the student will describe the interest and abilities needed to be successful in these work areas.

ACTIVITIES:

Introduction
Before considering a career in advertising art, it is necessary to see the various work areas in advertising art and to determine what abilities and interests an art director should have for each area.

Tasks
1. Have students bring in examples of all the places where they have seen commercial advertising, (i.e., magazines, newspapers, booklets, posters, record album covers, television, etc.).
2. Have students list and discuss the basic elements of commercial advertising, (i.e., use of color, arrangement of shapes and lettering, etc.).
3. Have students identify in their discussion which interests or abilities on the part of the art director, might be needed to express each recognized element.

   The following chart outlines an example of how the above might be accomplished: (cont.)

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* The curriculum concept is found in the teacher's notes.

"Art Directors - Interests and Abilities:

Interests and Abilities as Related to Jobs in Art Direction

Art Director's Work Area	Basic Elements Identified in Work Area	Interest or Ability Required
Magazine	Contemporary look Corporate image Merchandise information	Ability to accept change Interest in big business Interest in business ethics and legal standards
	Art techniques	Interest in various art mediums in relation to reproduction qualities
	Lettering techniques	Interest in the affect of the various styles of lettering on the general public.
Newspaper	Same as magazine + restruction of color (black and white must be sufficient) plus constant 'job rush'	Same as magazine + ability to incorporate current events into basic advertising elements ability to think quickly and pick out main information
Booklet	Same as magazine + supportive influence	Same as magazine + ability to comprehend and supplement written information with meaningful visual materials i.e., knowledge of medicine, travel, beauty (cosmetics) etc.
Posters	All the above + extreme directness	All the above + extreme originality and the ability to be concise in dealing with symbols.
Record album covers	All the above + support to artist in music area or similar	All the above + ability to recognize and to symbolize the artistic accomplishments of others

"Art Directors - Interests and Abilities:

Editorial	Several photos or illustrations must relate to one another as well as to story and lettering.	Interest in creative writing and the ability to translate emotional and esthetic qualities into visual images.
Television	Same as all the above + addition of sound and motion picture	All the above + interest in comedy and drama and ability to experiment and explore. Also ability to work as part of a team, with satisfaction of contributing to a finished work without personal gratification.

Summary

We have now identified the interests and abilities that an art director must have in order to be successful in various areas of advertising.

RESOURCES:

Samples of advertising art: magazine ads, newspaper ads, posters, etc.
Teacher's notes (including The Art Director at Work, Arthur Hawkins: The Art Director's Club of New York, 1959).

EVALUATION:

Given student a list of advertising areas and basic elements have describe one interest or ability the art director must have to create each element listed.

Advertising Art - Senior High
"The Advertising Artist's Studio"
Eileen G. Davis

CURRICULUM CONCEPT:

To establish routines for good work habits in the art room.*

RELATED CAREER EDUCATION CONCEPT:

To identify how an organized work area benefits the advertising artist.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	Given an organized advertising studio, the students will: 1. identify how basic materials and equipment used by the advertising artists are arranged.
Skill Competency	2. identify the purpose of such arrangement.
Educational Awareness	3. describe how these arrangements might relate to the classroom work area.

ACTIVITIES FOR SESSION ONE:

Introduction
The first concern of the advertising artist is his work area. As an advertising artist you will be working with several materials and various studio equipment. Today we will take a look at an actual art studio and how the advertising artist arranges his materials to meet his needs.

Tasks
Field trip: (Optional) students visit an actual organized advertising art studio, or audio-visual materials: students are presented with filmstrip or photographs and illustrations of organized advertising art studios. Have students list materials and equipment that they have seen. Have students describe work area and how and where materials,etc. , are stored.

Summary
We have now identified the basic materials and equipment used by the advertising artists and we have made notes describing the studio work area with reference to storage of materials and equipment.

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* The curriculum concept is found in the teacher's notes

"The Advertising Artist's Studio"

ACTIVITIES FOR SESSION TWO:

Introduction

Each of us has now seen an actual organized advertising art studio. We will discuss the notes we have taken and stress how what we have seen might relate to our own classroom studio.

Tasks

1. Have students discuss how and where materials have been stored in the studio in relation to the total work area.
2. Have students discuss the purposes for the arrangement they have seen in relation to a room arrangement that might suit their own classroom studio. The following chart shows examples of how the above might be accomplished:

STUDIO's ARRANGEMENT of material or equipment	PURPOSE	RELATIONSHIP TO CLASSroom studio
1. central platform	posiing area for model	platform must be located where all students have full view of model
2. handy pencil sharpener	pencils must be kept sharp	since each student cannot be supplied with a mechanical sharpener, we must each keep a small one handy.
3. paper cutter on cabinet with blade locked down	speeds up sizing operations; blade down as safety precaution.	same as in actual studio

Other things that might be discussed are: projector, work bench, wrapping paper, drawing boards, reference library, spare storage space for pencils, rubber cement, etc.

Summary

We have now identified the purposes for having an organized art studio. We have also related these purposes to our own classroom needs.

RESOURCES:

An advertising art studio (optional), pictures and illustrations of organized art studios. Teacher's notes (including: Art in Advertising, David K. Stone; Pitman Publishing Corporation, 1961, New York City).

EVALUATION:

Given a photograph of an art studio, have students

"The Advertising Artist's Studio"

1. identify the purpose for the arrangement of 4 studio items,
2. identify how the placement of each item relates to the classroom organization.

FASHION DESIGN

LESSON/UNIT TITLE	AUTHOR (s)	# OF LESSONS
Fashion Jobs and Their Interdependency	Eileen G. Davis	3
Interests and Aptitudes Related to Fashion Design	Eileen G. Davis	1
Math, Social Studies, Science, Language Arts and the Fashion Designer	Eileen G. Davis	4
Seasonal Economics of Fashion	Eileen G. Davis	1
Planning a Career in Fashion	Eileen G. Davis	1
Groups and Institutions that Influence Work in the Fashion World	Eileen G. Davis	1
Expressing Values Thru Fashion	Eileen G. Davis Peggy Novey	1

Fashion Design - Senior High
"Fashion Jobs and their Interdependency"
Eileen Davis

CURRICULUM CONCEPT:

To describe the reason for studying.*

RELATED CAREER EDUCATION CONCEPT:

To identify how job specialization creates interdependency.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will list occupations in the fashion world.
Employability Skills	2. The student will list those obligations that the designer has to his co-workers.
Employability Skills	3. The student will list those obligations that the co-workers have to the designer.

ACTIVITIES FOR SESSION ONE:

Introduction
Explain to the class that the job of the fashion designer is just one of the many jobs in the world of fashion careers. As a fashion designer, they will have to work daily with many other people. To give them an overview of the careers associated with a fashion designer, they will view a filmstrip.

Tasks
View "Careers in Fashion." A discussion should follow that stresses the identification of the occupations viewed. The occupations in the filmstrip are: (Have students list them). The tasks of these workers should be discussed in relationship to one another.

Summary
Now the students are aware of the variety of occupations associated with the fashion industry.

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* The curriculum concept is found in teacher's notes.

ACTIVITIES FOR SESSION TWO:

Introduction

Explain to the class that to get a better view of the fashion world workers they will take a field trip to a fashion house or department store. This experience will give them a first hand look in the real setting.

Tasks

While on the trip students will interview a variety of workers engaged in their occupational tasks. Ask the students to pay close attention to the work being done by each worker and to identify the worker's occupational title.

Summary

Now the students are aware of the occupational tasks of various fashion workers.

ACTIVITIES FOR SESSION THREE:

Introduction

Explain to the class that in order to get an overall picture of the interdependency between fashion workers, they must share and discuss the information that was gathered on the field trip.

Tasks

Students share information from interviews in a class discussion. A "Fashion Designer's Interdependency Chart" is created by the class from the information that they have gathered.

SAMPLE CHART
FASHION DESIGNER'S INTERDEPENDENCY CHART

Co-Worker's Title	Co-Worker's Obligation to Fashion Designer	Fashion Designer's Obligation to Co-worker
Textile Manufacturer	Must produce fabric for designs	Must inform the textile manufacturer of type of fabric needed.
Fashion Model	Must be aware of design details and show the garments to their best advantage	Must inform model of design details and how garment is to be worn.
Clothing Manufacturer	Must keep designer aware of cost and production limitations	Must meet deadlines for seasonal production

"Fashion Jobs and their Interdependency"

Fashion Coordinator (Consultant)	Must keep designer aware of current trends and what competitors are doing	Must share design ideas with coordinator.
Sample Maker (Assist. Designer)	Must accurately construct sample garment according to designer's specifications	Must give sample maker accurate instructions for creating first garment
Fashion Photographer	Must photograph designs to their best advantage	Must inform photographer of most important fashion details of each garment
Fashion Illustrator	Must illustrate designs to their best advantage	Must inform illustrator of most important fashion details and construction of each garment
Fashion Editor	Must accurately describe designs and give a critical opinion	Must design to meet the needs of the editor's audience

Summary

Now the students are aware of the interdependency created by job specialization in the world of fashion.

RESOURCES:

Women's Wear Daily (Want Ads)
Pictures of people in various
fashion occupations
Large sheet of paper for chart
Assorted crayons or markers

Fashion house
Pattern-making house

Films: "Careers in Fashion"
Educational
Dimensions Corp.

EVALUATION:

Have students list:

1. Five of the fashion designers co-workers
2. One obligation that each has to the Designer
3. One obligation that the designer has to each co-worker

Fashion Design - Senior High
"Interests and Aptitudes Related to Fashion Design"
Eileen G. Davis

CURRICULUM CONCEPT AND RELATED CAREER EDUCATION CONCEPT:

To become aware of the interests and aptitudes necessary in the fashion design field.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of "self" by understanding one's own interests and aptitudes.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will identify those interests and aptitudes necessary for a fashion designer
Self Awareness	2. The student will list his interests and aptitudes and match them with those of a fashion designer

ACTIVITIES FOR SESSION ONE:

Introduction
Before one considers a career as a fashion designer it is necessary to identify the following:

1. What interests and aptitudes should a fashion designer have?

2. What interests and aptitudes do I have?

3. Do I have any interests and aptitudes that might lead to a career as a fashion designer?

Tasks
Provide the students with daily newspapers from which they will locate fashion designer want ads to determine the abilities and interests necessary for a fashion designer. Here they will also find articles about designers with biographical information.
(Stress: Those designers which come from the same geographic area or who might be from the same ethnic or economic background as the students.)
Have students list those interests and aptitudes that seem to prevail throughout the biographies.

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*The curriculum concept is found in the teacher's notes.

"Interests and Aptitudes Related to Fashion Design"

Summary

The students have identified interests and aptitudes required of a fashion designer. They will later compare these to their own interests and aptitudes.

ACTIVITIES FOR SESSION TWO:

Introduction

In the previous session the students identified interests and aptitudes required for a fashion designer. In this lesson the students will identify these factors as they relate to themselves and compare their own interests and aptitudes to that of a fashion designer. This task will provide information for the student who may have interests in the fashion industry.

Tasks

Have students list their own interests and aptitudes. Have them refer to:

1. Favorite subjects in school.

2. Success and failures in various subject areas.

3. Hobbies and outside interests.

4. Special achievements

Self Quiz:

The above information may help the student to answer the following questions:

1. Do I like to keep up with all that is new in fashion?

2. Do I look at what others are wearing?

3. Do others ask my advice on what they should wear?

4. Do I enjoy making my own clothes?

5. Do I like to work with my hands?

6. Do I like visiting museums?

7. Am I a leader in my group?

8. Am I experimental in my way of dress?

9. Am I happy when I am being creative?

10. Do I notice costumes in plays or movies?

"Interests and Aptitudes Related to Fashion Design"

11. Do I check to see who the costume designers are in movies?

12. Do I read fashion stories and columns in the newspapers?

13. Do I regularly read any fashion magazine?

14. Do I enjoy fashion shows?

Summary

We have increased our awareness of our own aptitudes and interests and have compared them to those interests and aptitudes which a fashion designer should have.

RESOURCES:

Newspaper want ads, biographies of fashion designers

Quiz from: Looking Forward to a Career in Fashion
by Margot Siegel. Dillon Press, 1970.

EVALUATION:

1. List two skills or aptitudes necessary for a fashion designer.

2. List two areas of interest that may contribute to success in the fashion industry.

3. List your aptitudes and interests under the most appropriate heading:

Related to Fashion Designer	Unrelated to Fashion Designer	Check Whether	
		Aptitude	Interest

Fashion Design - Senior High
"Math, Social Studies, Science, Language Arts and The Fashion Designer"
Eileen G. Davis

CURRICULUM CONCEPT:

To design clothes for everyday use.*

RELATED CAREER EDUCATION CONCEPT

To become aware of how education and work are inter-related.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. The student will be able to explain how an education in the basic subject areas related to the work of the designer.

ACTIVITIES FOR SESSION ONE:

Introduction

The work of the fashion designer depends a great deal on what is learned in the basic subject areas. Fashion designers are often involved in the research process as they gather ideas for new designs. This specific process points out how the designer relates mathematics, social studies, science, and language arts to his work. First, we will identify how mathematics relates to the work of the designer.

Tasks

1. Have students refer to math texts (their own or library books, pre-K to 12th grade) to determine various math skills that have been covered in their classes. Students list them and discuss how some might be used by the fashion designer. Students may refer to duties of the fashion designer as covered in previous lessons. Examples of how mathematics relates to the work of the fashion designer:

   a. Price/Cost
      The designer must determine his budget and work within it.
   b. Yards/Inches
      The designer must be accurate in determining yardage as it applies to fabric for his designs and seam allowances to be included when drafting patterns.

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* The curriculum concept is found in the teacher's notes

c. Conversion
   The designer may in his research have to refer to the metric system of measurement or European garment sizing. In this case he would have to interpret information for his co-workers.

d. Fractions/Decimals
   The designer must be extremely accurate in his measurements since the difference between two garment sizes may be only a fraction of an inch in some areas (i.e. hemline).

2. Explain how math was used to create what you are wearing.

Summary

We have discovered how designers use a knowledge of basic math for every day problem solving.

ACTIVITIES FOR SESSION TWO:

Introduction

The fashion designer is dependent upon knowledge which is acquired in basic social studies courses. We will identify how social studies relates to the work of the fashion designer.

Tasks

1. Students discuss the following information.
   History - Designers must have a knowledge of history when designing from period costumes. Costume designing for the stage requires research of specific historic events, and how they related to what people wore (i.e. with the invention of the automobile at the turn of the century men and women wore dusters. When Marco Polo returned from the Orient, Europeans made clothes from silk). Edith Head designed over 1,000 costumes for the movie, "The Ten Commandments." For this she had to have knowledge of ancient history.

2. Discuss how geography is used in designing.
   a. Designers must consider climatic conditions when designing clothes (i.e. light weight vs. heavy clothing, long vs. short sleeves).
   b. Designers must consider terrain when designing for travel and resorts (i.e. what to wear to the beach or to the mountains).
   c. Designers must consider regional fashion aptitudes (i.e. how does rural living or urban living relate to design ideas).
3. Design three outfits.
   a. a period costume and identify the period
   b. Design a daytime outfit for:
      summer in the city
      summer in the mountains

4. Explain the details of outfits (a) and (b) in relation to where they will be worn and how and why they differ.

Summary

We are now aware of some ways in which a basic education in social studies relates to the work of the designer.

ACTIVITIES FOR SESSION THREE:

Introduction

A basic education in science is often very helpful to the fashion designer. We will investigate how the designer uses knowledge of science in everyday work situations. (Industry has prepared specific materials to identify how science relates to the designer.)

Tasks

1. (Optional) Field Trip: Students may visit Burlington Mills walk through exhibition and see actual working models of mechanical and chemical treatments that are being used in the manufacture of clothing and fabrics. Inform students that they should make notes on how these treatments affect the designer's work. (This information is given in the commentary which accompanies the show.)

2. Students may study the Burlington Mills exhibition folder and make notes how chemical and mechanical treatments given to fabrics and clothing affect the work of the designer. (i.e. pleating and pressing machines, water repellant treatments, synthetic fabrics and wear limitations.)

3. Have students discuss notes that they have taken.

Summary

We now have some idea why a fashion designer must have some knowledge of science.

ACTIVITIES FOR SESSION FOUR:

Introduction

Language arts is not to be forgotten when determining the basic educational skills that are needed by the fashion designer. By again reviewing the duties of the designer it will become apparent how language arts is used in day to day work situations.

Tasks

1. Students review the fashion designer's obligation to his co-workers and discuss how language arts is used. Stress the following information out in the discussion: A designer must be able to verbalize

and express his ideas accurately when communicating with all of his co-workers.
   a) relating needs to textile manufacturers and consultants
   b) giving instructions to assistants and sample-makers.
   c) giving accurate commentary when introducing the fashion details of a new design.
   d) expressing himself as briefly as possible while giving maximum information.

2. A designer must be able to read and interpret when acquiring information needed for inspiration and production.
   a) Reading fashion publications
   b) Reading historical and scientific fashion related literature.
   c) Reading and interpreting instructions for making garments.

3. Have each student list what he or she is wearing, giving as many details as possible. Have students exchange papers and then write a brief description of the outfit listed on his paper.

4. Have student sketch outfit from his own written description.
   Example:

	List	Description *
Dress:	Yellow Cotton High waist Back zipper Scoop neck Yellow, cotton belt	A yellow, cotton empire dress with a scoop neck, back closing and self-belt. Matching shoes and bag
Shoes:	Yellow Platform soles Straps	
Bag:	Yellow Shoulder strap Envelope	

(*Note: Explanation of example description. Sketch always accompanies description of designs. This is why all details are not written.)

Summary
We are now familiar with ways in which the designer uses basic language arts.

RESOURCES:

1. School library

2. Student textbooks from math, science, social studies, language arts

3. Burlington Mills pamphlets on new technology in fashion
4. Women's Wear Daily and various fashion publications
5. Pencils, all purpose sketch paper 9" x 12" or 11" x 14"
6. Transparent water colors, brushes, crow quill pens

EVALUATION:

1. Have students state two ways basic mathematics skills relate to the work of the fashion designer.
2. Have students state two ways basic social studies skills relate to the work of the fashion designer.
3. Have students state two ways basic science skills relate to the work of the fashion designer.
4. Have students state two ways basic language arts skills relate to the work of the fashion designer.

Fashion Design - Senior High
"Seasonal Economics of Fashion"
Eileen G. Davis

CURRICULUM CONCEPT:

To distinguish how economic factors influence the fashion designer.*

RELATED CAREER EDUCATION CONCEPT:

To understand how occupational supply and demand relate to career planning.

THEMES AND OBJECTIVE

Theme	Objective
Economic Awareness and Skill Competency	The student will identify how the "free lance" fashion designer adapts to seasonal economic trends.

ACTIVITIES:

Introduction

The "Free Lance" fashion designer may work seasonally in an effort to adapt to economic trends in the ready-to-wear fashion world. Since his specialized area of design may be in season for only part of the year, he may find it necessary to work for two, three, or more manufacturers in other design areas. This is how the "Free Lance" fashion designer insures himself against unemployment. We will look at the trade calendar and determine how the designer adapts to seasonal economic trends. (Teacher may present students with examples of seasonal want ads from Women's Wear Daily.)

Tasks

1. Present students with trade calendar which lists when each seasonal line must be ready for presentation. Have students discuss each season in relationship to the employmnnt possibilities of a "Free Lance Fashion Designer."

Trade Fashion Calendar	Points to Be Stressed in Discussion
January Summer collections Spring Couture	Ready-to-wear designer may travel on his own to see new collections

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* The curriculum concept is found in the teacher's notes.

"Seasonal Economics of Fashion"

February Fall sweater & knit wear Fall shoe market	Few designers can design between these areas; specialization is in a very narrow area
March Junior sportswear Fall Men's & boys	Uni-sex trend has allowed some designers to work in men's & women's wear
April Ski Misses sportswear	Once-a-year Opportunities for many designers.
May Major fall ready-to-wear Coats, suits, dresses, ensembles Fall bridal	Short season
June Couture fall Ready-to-wear sportswear	Opportunities for many designers
July Fall accessories	Narrow specializations - opportunities for some
August Holiday Cruise and Resort Spring shoe	Short season, many opportunities
September Early spring Sweater & knitwear	Opportunities for many designers.
October Swim suit	Once-a-year (good for lingerie designer) Opportunities for many designers
November Spring bridal	Short season
December Santa Claus takes over	A good time to make plans and connections for next year.

2. Have students as a result of their discussion list:
   1) Areas in which designers will find the most competition for work;
   2) Seasons in which the designer will find the most competition for work;
   3) Areas of specialization that might overlap to extend work opportunities.

Summary

We have identified how the "Free Lance" fashion designer adapts to seasonal trends.

RESOURCES:

Women's Wear Daily
Fashion calendar (ITT Educational Services, Inc.)
Teacher's notes

EVALUATION:

Have students identify 5 ways the "free lance" fashion designer adapts to seasonal economic trends.

Fashion Design - Senior High
"Planning a Career in Fashion"
Eileen G. Davis

REGULAR CURRICULUM CONCEPT AND RELATED CAREER EDUCATION CONCEPT:

To be responsible for career planning.*

THEMES AND OBJECTIVE

Themes	Objective
Educational awareness	Given examples of educational preparation needed for various fashion jobs, the student will produce a tentative plan for developing his long-range career possibilities.
Self awareness and Decision making	

ACTIVITIES:

Introduction
Inform students who wish to major in fashion that:
1. Specialized areas in fashion require a certain amount of educational preparation.
2. Each student must plan a course of study in relation to his own interests in the fashion field.

We will survey the requirements needed for various fashion jobs and then determine the educational preparation needed to meet these requirements.

Tasks
1. Present students with want ads from several issues of Women's Wear Daily. Have them copy job titles and requirements for jobs that interest them. (See sample at end of lesson).

The following general information should also be presented to the students:

DESIRED EDUCATIONAL LEVEL	FASHION RELATED CAREER
B.A. or above	Administrator, Manager Teacher Buyer, Editor, Coordinator
H.S. and technical	Advertising Lay-out

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* The curriculum concept is found in teacher's notes.

"Planning a Career in Fashion"

	Designer: Textile Clothing Millinery Draper Cutter Pattern draftsman
H.S. Graduate	Illustrator Photography Mannequin Colorer Model Secretary Receptionist Piece Goods worker
Less than H. S.	Wardrobe Mistress Stock Worker

Note:
(Information regarding specific courses in the school should be made available to the students at this point).

2. Have students discuss jobs that interest them in relation to educational preparation needed to meet job requirements.

3. Have each student:
   a) Identify educational level he must ultimately achieve to fill his chosen job.
   b) Identify courses that are offered in the high school which might help him meet job requirements.
   c) Identify other jobs that require the same or similar educational preparation as the original job choice.

Summary
The student has produced a tentative plan for developing his long-range career possibilities in the world of fashions.

RESOURCES:

Women's Wear Daily (want ads), Career file from V.I.E.W. (Vital Information for Education and Work), High School Student Handbook or schedule of course offerings.

EVALUATION:

Assess the product from task 3 above.

Fashion Design - Senior High
"Groups and Institutions that Influence Work in the Fashion World"
Eileen G. Davis

CURRICULUM CONCEPT:

To identify how various social groups effect fashion designing.*

RELATED CAREER EDUCATION CONCEPT:

To identify the various groups and institutions that influence the nature and structure of work in the fashion world.

THEMES AND OBJECTIVE

Themes	Objective
Economic Awareness and Career Awareness	Given a look at the fashion world through the mass media, the student will describe how various groups and institutions influence the nature and structure of work in the fashion world.

ACTIVITIES:

Introduction

There are many groups and institutions that influence the nature and structure of work in the fashion world. Fashion is always in front of us. The mass media, our first group, plays an important role in disclosing who influences the nature and structure of work in the fashion world. By drawing our attention to newspapers, magazines, radio, T.V. etc., we will identify how other groups and institutions influence the nature and structure of work in the world of fashion.

Task

1. Have students go through various magazines and newspapers and cut out articles dealing with fashion. Have students also write down the names of groups and institutions that are mentioned on T.V. or radio in connection to any work area in fashion. Stress: The groups and institutions listed from newspapers, radio, T.V., etc. do not have to be directly related to the fashion trade.

2. Students discuss how each group or institution has influenced the nature and structure of work in the fashion world.

(Below is a sample of information that might be gathered)

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*The curriculum concept is found in the teacher's notes.

"Groups and Institutions that Influence Work in the Fashion World"

(Below is a sample of information that might be gathered?

GROUPS AND INSTITUTIONS	INFLUENCE ON FASHION
Motion Picture Industry	1. movie stars become trend-setters and help sell cloths, which create more fashion jobs. 2. Hollywood spot-lights California designers and created a new fashion market.
Political Groups	1. prominent political figures are often trend-setters, i.e. Nehru jackets created more jobs in men's wear. 2. Women's lib groups boosted uni-sex trend which created possibility for men's wear workers to do women's wear and vice-versa. This group also affected the bra manufactures who have had to change their line of work.
Government	1. In most areas the law requires that we wear clothes. Relaxation of dress laws means briefer costumes and less business for textile workers. 2. Tariffs and laws governing imports and exports, expand or limit fashion work opportunities.
Sports figures	1. prominent sports figures are often trend-setters. 2. Sports events create trends and more jobs in fashion, i.e. baseball hats and jackets, the tennis shirt and shoes, the jockey cap.

3. Additional groups and institutions the students may want to discuss are:
    a. stock market (Wall Street)
    b. music industry
    c. transportation industry
    d. others

Fashion Design/Communication Skills - Senior High
"Expressing Values Thru Fashion"
Eileen G. Davis, Peggy Novey

CURRICULUM CONCEPT:

To design clothing for everyday use. To demonstrate the ability to express a design in writing.*

RELATED CAREER EDUCATION CONCEPT:

To identify how one's values and attitudes enter into fashion design.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	1. The student will describe what he considers to be an appropriate school outfit.
Educational Awareness and Skill Competency	2. The student will draw using another student's description, that outfit.
Skill Competency	3. The student will identify which outfit they think is more appropriate than another and why.

ACTIVITIES:

Introduction
Each one of you are involved in some fashion decision each day. Example: Every morning we have to weigh our own values in deciding what to put on to wear to school. At first we will identify, in writing, what the ideal school outfit is to each of us. Then we will attempt to sketch the outfits as described.

Tasks
1. Each student will write a paragraph, giving as much detail as possible, describing the ideal school outfit.

2. Students will exchange paragraphs and then sketch the outfit described.

3. The drawings will be displayed and students will discuss each design. Sress: discuss the details of the outfits in relation to their appropriateness for school. Then discuss the reasons why certain outfits were rejected as school outfits and where those outfits might be more suitable.

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* The curriculum concept is found in teacher's notes.

"Expressing Values Thru Fashion"

Summary
We have now created both verbally and visually what we consider to be appropriate outfits for school. We have also identified the reasons for our choices.

EVALUATION:

Students will be able to:
1. Verbally describe an outfit.

2. Transfer a verbal description into a visual image.

3. Identify what values influenced his choices.

INDUSTRIAL ARTS

Lesson/Unit Title	Author(s)	No. of Lessons
Buying Real Estate	David Martin	1
Man and Technology	David Martin	1
Managing Construction	David Martin	1
Applying Technology to People	David Martin	1
The Skill of the Surveyor	David Martin	1
Planning Your Living Space - The World of Construction	Richard Volo David Martin Don Matos	1
Learning About Architects	David Martin	1
Making Working Drawing	David Martin	1
The Operating Engineer	David Martin	1
The Carpenter	David Martin	1
Writing Specifications	David Martin	1

Industrial Arts - Grade 10
"Buying Real Estate"
David Martin

CURRICULUM CONCEPT:

The learner will be exposed to the concept of buying real estate. The learner will use a direction circle in the laboratory class.*

RELATED CAREER EDUCATION CONCEPT:

The student will understand the different types of educational preparation that are necessary for various careers.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student will explain the functions of the: a. Real estate broker b. Real estate salesman
Educational Awareness	The student should be able to tell what the broker and salesman must do to get a license.

ACTIVITIES:

Introduction
None provided.

Tasks
The tasks in this lesson take the form of a lecture and discussion presented by the teacher.

At one time land was free, but today we have to buy the real estate we want. There is a person who gets the buyer and seller together. This is the salesman or broker.

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*The curriculum concept is found in Teacher's notes.

"Buying Real Estate"

ACTIVITIES:

The function of a real estate broker is to get the seller and the buyer together. He can do this work himself, or as is done in most cases, he hires one or more real estate salesmen.
The salesman's job is to:
1. Get the buyer and seller in agreement.
2. Know the market by checking the various newspapers, make phone calls, send postcards, get leads from his friends or broker, etc.

The broker's job is the same as that of the salesman if he works on his own, plus:
He is responsible, and must countersign all official papers that pass through his own office.
He is responsible for training his salesmen.

All people who work in a broker's office must be licensed by the state.
Requirements:
Broker: 1. Minimum of 12 college credits in real estate.
2. One year of experience as a salesman.
3. Pass test given by the state.
Salesman: 1. Take and pass test given by the state.
2. Minimum age 18.
3. He must work for a broker.

(Engage students in a discussion):
Who knows a broker or a salesman? (Tell of one)
Salesmen work on a commission basis. What is a commission? (Explain commission).

Work out some problems to show the money involved.
Commission - 6%
Selling price - $40.000 6% x $40.000 - $2,400
The salesman would get a part of this commission, depending upon his arrangement with the broker.
Who would like to work as a real estate salesman?

Summary
The teacher should summarize the lecture and discussion being sure to include the following points.

The real estate broker is responsible and must countersign all official papers that pass through his office. He hires and trains the salesmen he needs. He must take a test and be licensed by the state after he has worked two years as a salesman and has taken at least 12 college credits in real estate. The salesman must take and pass a test given by the state to get his license. He must work for the broker.

"Buying Real Estate"

RESOURCES:

"Real Estate Salesman" by John P. Lomenzo
Published Department of State, Division of Licensing Services, Albany, N.Y.

EVALUATION:

The student will answer the following questions:
1.What is the job of a real estate broker?
2.What is the job of a real estate salesman?
3.What are the license requirements of the broker?
4.What are the license requirements of the salesman?
5.What is the minimum age of the broker and the salesman?
6.Who countersigns all official documents in the broker's office?

Industrial Arts - Grade 10
"Man and Technology"
David Martin

CURRICULUM CONCEPT:

To understand that the development of tools and increasing technology increases accuracy.*

RELATED CAREER EDUCATION CONCEPT:

Beginning competency. Occupational success requires knowledge and skills related to use of various tools.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	1. Given various drilling tools the learner will demonstrate the use of each tool and record the time spent in using each.
Skill Competency and Educational Awareness	2. Given various drilling tools the learner will identify one advantage for each type.

ACTIVITIES:

Introduction
Discuss the development of tools. Display a primitive bow drill, a hand drill and an electric drill. Discuss each in terms of efficiency and accuracy.

Tasks
Each student will drill three holes with each tool. Record the time for making each hole-relate this to each drill's efficiency. Discuss the tools in terms of competency necessary for effective utilization and materials necessary for production.

Summary
Explain that each student has had an opportunity to use tools which perform a similar function.
Ask:
Which tool was most accurate?

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*The curriculum concept is found in World of Construction: Industrial Arts Curriculum Project, published by McKnight & McKnight, Bloomington, Illinois, 1970.

Summary

Which was easiest to use?
What are advantages of the primitive bow drill? the hand drill? the electric drill?

EVALUATION:

Name one advantage for each of the following drills:

Primitive bow drill______________________
Hand drill______________________________
Electric drill___________________________

Industrial Arts - Grade 10
"Managing Construction"
David Martin

CURRICULUM CONCEPT:

Managing construction, the students should understand the concepts of planning, organizing, and controlling.*

RELATED CAREER EDUCATION CONCEPT:

Decision making - the student will understand the elements involved in efficient planning.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill competency	1. The student will demonstrate that he has learned that planning involves the fomulating of an idea which is researched, designed and produced.
Skill competency	2. The student will demonstrate that he has learned that organizing involves some structuring and supplying men and materials.
Skill competency	3. The student will demonstrate that he has learned controlling is the directing, monitoring, reporting, and correcting of men and materials.

ACTIVITIES:

Introduction
Why is it necessary to have a manager in your home? What does this manager do?
Lecture and Discussion-
Any efficient operation requires planning, organizing and controlling. For example take a picnic, In order for it to be successful, it must be planned. Here, there, several questions that must be answered. Where shoud I go? What should I take? What activities should we engage in? Games, cookouts, fishing, etc? These have to be planned for. How do we pack our equipment? Who will do what? Who is expected to take part in activities? These involve organizing. All these activities should be controlled. Not

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*The curriculum concept is found in Teacher's notes.

"Managing Construction"

Introduction

everyone will drive the car, the fire has to be going before the hamburgers can be made. In other words, there must be a logical sequence of events. These same principles of planning, organizing and controlling can be applied to the management of a home or a construction project. (use transparency #7 management functions). Point out where the construction contractor, foreman, recorder, safety and grievance man, equipment supervisor, and the skilled worker fit in. (ref. Teacher's manual p.16 and 17).

Tasks

There are many new words that must be added to your vocabulary if you don't already know them. In either case today we will play the "Build Game" which is designed to familiarize you with some terms used in construction.

Summary

Summarize the three concepts which are essential for efficient operation. (Planning, organizing, controlling).

RESOURCES:

10 Big Builder games made up in advance (see Teacher's manual, pg. 18).
Transparency #7 from kit.

EVALUATION:

The student will correctly respond to the following questions. In what phase of construction would do research to determine what must be done? In what phase of construction would we decide how the job should be done? Why is it important to control the operations on a job? Question and answer - students should give the meanings of words used in the Build Game.

Industrial Arts - Grade 10
"Applying Technology To People"
David Martin

CURRICULUM CONCEPT:

Applying technology to people. The students should understand how to organize themselves into efficient work units.*

RELATED CAREER EDUCATION CONCEPT:

Decision making.

THEME AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student should know the essential task of a: Foreman Timekeeper Recorder Equipment Supervisor Safety and Grievance Man

ACTIVITIES:

Introduction

Personnel technology is the influenceing of people to work safely and efficientlyand to find jobs they like and do well. Discuss the readings from the text, (pp. 12-16). How men are trained, hired, denoted, retired. Working conditions, explain and discuss task (ref. teacher's manual pp. 13 and 14).

Tasks

Shop Activity - Organize class into groups of 4 or 5. Each group should have a foreman, timekeeper, recorder, equipment supervisor and a safety and grievance man. Discuss with the class the responsibilities and duties of each position. Since cooperation between individuals is essential in a shop class as well as on the job, the discussion should include things others can do to facilitate each position.

Summary

None provided.

RESOURCES:

Text book, lab manual, teacher's manual.

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*The curriculum concept is found in Teacher's manual

"Applying Technology to People"

EVALUATION:

The student will list the major tasks and responsibilities of a: foreman, timekeeper, recorder, equipment supervisor, and safety and grievance man.

Industrial Arts - Grade 10
"The Skills of a Surveyor"
David Martin

CURRICULUM CONCEPT:

Expose the children to the concept of mapping and surveying.*

RELATED CAREER EDUCATION CONCEPT:

The student will recognize that different career direction require varying types of educational preparation.

THEME AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will describe what service the surveyor performs for the community.
Educational Awareness	2. The student will list the requirements for being a surveyor.
Career Awareness	3. The student will name the types of surveys that are made.
Career Awareness	4. The student will list the instruments used by the surveyor.

ACTIVITES:

Introduction
In our last lesson we discussed buying real estate, and the role of the broker. In order to find the exact location of that property we need the services of another person. From your readings who is that person? (the surveyor).

Tasks
The teacher will conduct a discussion along the following lines:
Today we will go over the homework that was assigned. I will expand on the requirements for being a surveyor and the services he performs for the community.
(to teacher) Start with a clean blackboard. Elicit from the class the six types of surveys, write them on the blackboard with a brief description.
Example (1) Land survey: Made to establish boundaries and provide records

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*The curriculum concept is found in Teacher's notes.

"The Skills of a Surveyor"

Tasks

to show the proper location and sub-division of land in any specified area.

2. Topographic survey
3. Route survey
4. Hydrographic survey
5. Aerial survey
6. Construction survey

Further descriptions in text p. 3

In making these surveys the surveyor is performing a most vital service for his community and the country as a whole. There are several ways a person, man or woman, could become a surveyor. A combination of post-high school courses in surveying, and working with a surveyor to learn the techniques used, are offered in technical schools and colleges.

As a high school student, taking courses in algebra, geometry, trigometry, calculus and drafting would be of definite advantage to you.

The surveyors primary instrument is the transit. (teacher: show the transit and demonstrate how it is used.) In your lesson yesterday you worked with your direction circles to plot the boundaries from a given description. The transit can be used to do the same thing but more accurately. (demonstrate). It can also be tilted up or down at precise angles depending on where it is being used. To measure distances certain reference points called monuments or bench marks are used. The surveyor also uses a level rod. (demonstrate). All the information gathered has to be clearly and neatly recorded to be of value.

Summary

We covered 6 different types of surveys which are still listed on the board. (ask 6 students to read aloud 1 each). The surveyor, in making these surveys, uses a transit and is aided by another person holding a level rod. Preparation for this type of work starts in high school where one would take courses in surveying and actually working with a surveyor to gain experience.

RESOURCES:

chalkboard, transit - desirable, not necessary.

"The Skills of a Surveyor"

EVALUATION:

The student will correctly respond to the following questions.
1. What service does the surveyor perform for the community?
2. What must a person do to become a surveyor?
3. Name 6 types of surveys.
4. What is the name of the instrument used by the surveyor?

Industrial Arts - Grade 10

"Planning Your Living Space - The World of Construction"

Richard Volo
David Martin
Donald Matos

CURRICULUM CONCEPT:

Planning your dream house.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of the aspects behind the decision a person makes as to the design of the living environment which is more consistent with his values.

THEMES AND OBJECTIVES:

Themes	Objectives
Self Awareness and Attitudes & Appreciations	The students will realize that his values will determine his living environment.
Self Awareness and Attitudes & Appreciations	After determining his values, the student will make a decision as to the site, type, and arrangement of his living environment.
Attitudes & Appreciations	The student will become aware of the values of other students.

ACTIVITIES:

Introduction

1. Give the students the following instructions: "On the paper provided. draw a picture of the place where you will feel at home. Artistic quality is not necessary."
   Note: The following is a sample method of leading a discussion on the values students hold in relation to the type of home they would desire. The items below are examples only. Allow students to expand this list and accept all suggestion. Elicit student opinion on the advantages and disadvantages of each.

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*The curriculum concept is found in Planning Your Living Space - The World of Contruction, edited by the Industrial Arts Curriculum Project, published by McKnight & McKnight, Bloomington, 1970.

"Planning Your Living Space - The World of Contruction"

Tasks

1. How many students drew a house
    a) on land?
    b) above water?
    c) underground?
    d) under sea?
    e) no house at all
2. How many people drew:
    a) house in the country (or farm)?
    b) house in the city?
    c) house in the suburbs?
    d) house in a forest?
    e) house near the shore?
    f) other
3. How many people drew:
    a) a cabin?
    b) a private house?
    c) an apartment house?
    d) a tree house?
    e) other
4. From the above, students should identify with a setting and type of house that would be suitable to them. The teacher should now allow the students to express their desires as to the layout of the rooms in home of their choice. Teacher could present model floor plans if needed.
5. Stress to pupils the limitations they have on the size of the rooms because of practical considerations, and if they like a two-story dwelling, to leave an area for stairs.
6. Scale drawings of these rough sketchs and possibly even scale cardboard models can be made.

Summary

1. Allow students to exchange sketchs and for each student to offer his reasons for the type of house he has drawn (large classes should be broken into smaller groups for this exercise). Be open to the student who may not be able to formalize a reason for his layout beyond that of personal taste.
2. Caution the students that they might have to modify their plans depending on practical limitations, e.g., money available, local building codes, building materials, plumbing and heating problems. Students who plan to have families should be sure to include room for them.

RESOURCES:

Paper, rulers, pencils (drafting equipment if possible). There are many magazines and books which are available to students giving examples of many types of homes.

"Planning Your Living Space - The World of Contruction"

EVALUATION:

The student will have a definite idea as to the type of house, apartment or dwelling that he would like to live in. He will describe the dwelling and tell why it is suited for him but maybe not for others.

Industrial Arts - Grade 10
"Learning About Architects"
David Martin

CURRICULUM CONCEPT:

To understand the role of the architect in the building of a construction project.*

RELATED CAREER EDUCATION CONCEPT:

To understand the role of the architect in the building of a construction project.

THEME AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will learn three places an architect may work.
Career Awareness	2. The student will learn three areas in which an architect may specialize.
Educational Awareness	3. The student will learn how courses taken in High School may be a first step towards becoming an architect.

ACTIVITIES:

Introduction

The teacher will lead a discussion being sure to point out the following. We have discussed the duties of the craftsman, contractor, engineer, and architect. Let's take a closer look at the architect.

1. Where does he work?
2. Does he specialize and if so, in what area?
3. Which courses taken in high school may be used towards becoming an architect?

Tasks

The teacher will continue the discussion in the following manner-
An architect can be a very creative person. For example, take our high school (Herbert H. Lehman H.S.) It is the only one of its kind and was considered so innovative a construction that it won an award from the National Architects Institue. The architect must not only have a gift for artistic creation, but must be able to solve technical problems.

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*The curriculum concept is found in *Occupational Outlook Handbook*, 1972-73 Edition, U.S. Dept. of Labor.

"Learning About Architects"

His background should include:
Math,science, social studies, language and art.
All architects are licensed by the state in which they plan to work and must fulfull their requirements which generally are:

1. Graduation from an accredited professional school followed by 3 years practical experience in an architectural office.
2. (or) Practical experience (10 to 12 years) for admission to licensing examination.

There are many colleges which offer a 5 year curriculum leading to a Bachelor of Architecture degree. Most schools admit qualified high school graduates, some require 1 or 2 years college before admittance to 3 or 4 year architectural programs.

The architect has a choice of where he can work. Approximately two-fifths of all architects are self-employed. Most others work for architectural firms, engineers, builders, real estate firms and businesses having large construction programs, or for the government. Most self-employed architects plan and design a wide variety of structures, ranging from homes to churches, hospitals, office building and airports.

An architect working for large firms may specialize in one area such as design, drafting, specification writing, or contract administration (insuring that the structure is built according to plans and specifications).

Summary
We have covered several points concerning architects. He should be a creative person and be able to solve technical problems. Name three courses offered in high school that may be used towards becoming an architect. (Math, Science, Social Studies, Art, Languages).

When the architect works for a large firm he may specialize and work in a particular area. Name three areas in which he may specialize. (Design, drafting, specification writing, contract administration). An architect may work for the government. Where else may he work? (Self-employed). Name two types of structures which a self-employed architect may be responsible for planning and designing. (Small homes, churches, office building, apartments, airports, etc.)

EVALUATION:

1. The student will describe the academic preparation necessary to become an architect.
2. The student will describe the various areas in which an architect may specialize.

Industrial Arts - Grade 10
"Making Working Drawings"
David Martin

CURRICULUM CONCEPT:

Making working drawing.*

RELATED CAREER EDUCATION CONCEPT:

Making working drawing.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. Students will tell the duties of the senior draftsman, detailer and checker.
Career Awareness and Eucational Awareness	2. The student will tell how a person becomes a draftsman.

ACTIVITIES:

Introduction

Today we will discuss the job of a draftsman. Where he works, working conditions, and how a person can become a draftsman. At the end of this discussion you will be making a working drawing of a project.

Tasks

Lecture and Discussion:

When we say working drawing we are talking about a set of very clear instructions from which we work. It is the job of the draftsman, using special tools and equipment, to produce these drawings from notes and sketches which are made by a designer or an engineer. (Show an example of a working drawing). In a large shop you will find a senior draftsman whose job is to use the preliminary information supplied by the architect, designer or engineer to make "layouts." These are drawings of each part shown on the layout, giving dimensions, material, and all information necessary to make the drawing clear and complete.

A detailer uses these layouts to make complete detailed drawings.

A Checker carefully examines all drawings for errors.

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*The curriculum concept is found in Teacher's notes.

"Making Working Drawings"

Tasks

A draftsman can also work in a small shop with a limited amount of people where he is responsible for all phases in the production of a working drawing.
The draftsman may specialize in a particular field of work, such as mechanical, electrical, electronic, aeronautical, structural and architectural drafting.
Employment can be found in private industry or with the goverment.

If you should choose to become a draftsman, there are several ways you can reach your goal. In high school take as much math and science courses as you can, and of course drafting. Study shop practices, construction, and manufacturing processes. Keep in mind that all constructed and manufactured items you see were once drawn by a draftsman and the clearer your understanding of these theories and processes involved the better off you are. With this high school background you can attend technical institutes, community college, correspondence schools, or work with a draftsman in an apprenticeship program while attending school part time.

With proper training there can be advancement from Junior Draftsman to engineering positions.

Summary
We have discussed the draftsman. Let us briefly go over a few points. The draftsman is responsible for producing working drawings which are clear and precise instructions for the making of an object. He can work as a senior draftsman, detailer, or a checker in a large shop or in a small shop where he is responsible for all phases in drafting. To prepare yourself for this field take math and science in high school. You may then continue on to college or work on the job and go to school part time. Areas of specialization can be: mechanical, electrical, aeronatical, structural and architectural drafting. Employment can be found in government or in private industry.

Shop Activity:
Make a working drawing of the problem given in laboratory manual, pg. 57.

RESOURCES:

Have a drawing ready to be used as an example.

EVALUATION:

The student will list the duties of the senior draftsman, detailer, and checker.

"Making Working Drawings"

EVALUATION:

(continued)

The student will describe in detail the academic training needed to become a draftsman.

Industrial Arts - Grade 10
"The Operating Engineer"
David Martin

CURRICULUM CONCEPT:

Earthmoving.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of a typical occupation in construction illustrating the economic benefits and training necessary in the field.*

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	The student will learn where the operating engineer works.
Educational Awareness	The student will learn how much training one needs to become an operating engineer.
Economic Awareness	The student will learn the pay scale for this area (New York City).

ACTIVITIES:

Introduction

1. In our last lessons we discussed and did some exercises in clearing a site and locating the structure. Today we will do some exercises in earthmoving as was indicated by your homework. You may have noticed that something was missing in your readings. You read about back hoes, cranes, graders and massive power shovels, but not much is said about the person who operates and maintains these machines. What is his job title? How much training does he need? Where are some of the places he may work? What are some of the machines he operates? And how much does he get paid? These are some of the questions I will try to answer before we go to work on our projects.

Tasks

1. Lecture and Discussion: The general title for most of the men who operate this heavy equipment is "operating engineers" (write on blackboard). They are further identified by the machines they operate, as an example, a "bulldozer operator", (put on blackboard). From your past experience and the readings, tell me the name of 4 more jobs. (Only take one job title

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*The curriculum concept is found in the teacher's notes.

from a student and list it on the blackboard, example: craneman, derrier operator, powershovel operator, tractor operator, etc.)

If you have ever observed any of these men at work, it becomes quite clear that they went through a great deal of training. To give some background of the training, lets look at the duties of the crane operator. He manipulates various pedals and levers to rotate the crane chassis and to raise and lower the boom and load line. The boom is that section which extends from the chassis up to a given height, and the load line is the steel cable to which the load is attached. He must also be able to manipulate a number of other attachments to the boom for various construction purposes, example: buckets, pile driver, wrecking ball. He must have good eye-hand-foot coordination, good judgment in estimating proper load size and precision handling of heavy equipment. These aptitudes are essential.

What does it mean to be coordinated? (Get examples from the class. Through questioning make sure each member of the class understands what is meant by aptitudes.)

A minimum of 6,000 hours (3 years) of on-the-job training is required during an apprenticeship program. He learns to use, maintain and handle the equipment safely. In addition to on-the-job training, he must take a minimum of 144 hours of related classroom instruction in subjects such as welding, reading grade plans, physics, and automotive maintenance. Average age is between 18 and 30.

	Rate per hour	
City	Crane Operator	Bulldozer Operator
Baltimore	$6.02	$5.22
Boston	6.94	6.82
Cincinatti	6.94	6.74
Denver	5.25	5.25
Erie	7.58	7.58
Houston	5.60	5.60
Los Angeles	6.91	6.91
Milwaukee	7.04	6.79
Omaha	6.13	5.78
Phoenix	6.74	6.50
San Diego	6.76	6.66
Tampa	6.06	4.85

(Get a similar list. It may be hand written and duplicated in enough quantity for one for each student. Pass them out at this time and ask a student to read one or two.)

The rate of pay varies for each locality. The minimum union hourly rate for crane operators in Trenton, New Jersey in 1970 was $8.35. Why would a person in Denver get less than someone in New York who does the same job? (Explain bargaining for a union contract--factors such as cost of living, wages, fringe benefits, etc.)

Summary

We have discussed some aspects of the operating engineers job. The kinds of equipment he operates (elicit from class 4 types). We are now aware of the amount of training involved in this particular skill-3 year apprenticeship period and schooling in welding, physics, reading grade plans, and automotive maintenance. You were also given a representative list of some of the basic hourly pay at this time. (Continue with lesson #33 lab manual.)*

EVALUATION:

The student will describe in detail where and under what conditions an operating engineer works, the type of training he needs to become one, and the amount of money he could expect to earn in one years time.

Industrial Arts - Grade 10
"The Carpenter"
David Martin

CURRICULUM CONCEPT:

Building forms.*

RELATED CAREER EDUCATION CONCEPT:

The student will become familiar with the use of basic tools and equipment used by a skilled craftsman.

THEME AND OBJECTIVES:

Theme	Objectives
Career Awareness	The student will list 1. four tools used by the carpenter 2. four jobs a carpenter does at a construction site.
Skill Competency	The student will demonstrate the safe use of a rip saw.

ACTIVITIES:

Introduction

Our activity today involves the building of concrete forms in which we will be using crosscut and rip saws, claw hammer and tri square. This particular activity falls in the province of the carpenter. Learning to use these tools properly and safely does not mean that you have to become a carpenter because a career is something you will choose on the basis of your aptitude and abilities. But let us find out some of the tools he uses, how much training the carpenter needs to perform efficiently.

Tasks

Lecture & Discussion:

In our everyday activity there is a great deal we see and may not bring into focus. Let's find out what we know about the carpenter. (Elicit from students all the jobs they know that the carpenter does and list them on the blackboard. Ex. rect wood frame buildings including subflooring, sheathing, partitions, trimmings like molding, wood paneling, cabinets, windows, doorframes, doors, and hardware). What are some of

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*The curriculum concept is found in the Occupational Outline Handbook.

"The Carpenter"

Tasks

the tools the carpenter uses? (List on blackboard the appropriate responses from the class or give the names of some tools. Ex. saw, hammer, drills, chisels, planes, screw driver and power tools like portable saw, drill and riveting gun).

In your experience you may have seen carpenters at work on high buildings or on the inside of a house or apartment. One thing is clear, he must not be afraid of heights and should have good manual dexterity. To perform well he should be able to make rapid calculations, measure accurately and have a knowledge of drafting and blueprint reading. Let us take the example of the carpenter who is making concrete forms as you will be doing; how will a knowledge of blueprint reading help him in performing his job? (He must be able to read the working drawings to determine the correct size.)

To become a carpenter, most training authorities recommend the completion of a four year apprenticeship program, and related classroom training in math, drafting and blueprint reading.

Summary

We have discussed some of the jobs a carpenter must do which we have listed on the board. (Ask students to read them off, one per student). In doing his job he should not be afraid of height, should have good manual dexterity, be able to read blueprints and make rapid calculations. Some of the tools he uses are listed on the board. (Ask students to read them off, one per student). He must use these tools safely.

Today we will be making concrete forms, but before we start I will demonstrate the safe and proper way to use the tools. (Continue with Activity 38, Teacher's Manual and laboratory manual).

EVALUATION:

1. The student will list four tools used by a carpenter and describe in detail how they are used.
2. The student will saw a straight line with a rip saw and demonstrate its safe use.

Industrial Arts - Grade 10
"Writing Specifications"
David Martin

CURRICULUM CONCEPT:

Writing specifications.*

RELATED CAREER EDUCATION CONCEPT:

The student will recognize that concepts learned in class can be used in practical life situations.

THEME AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	1. The student will learn two reasons why specifications are important.
Educational Awareness	2. The student will learn two non-occupational settings in which knowledge of specifications are important.
Educational Awareness	3. The student will learn how the skills of a specification writer can be applied to other areas of the construction industry.

ACTIVITIES:

Introduction

If John ordered a new car and he wanted air-conditioning, carpeting, AM/FM radio, and heavy duty shocks, how would he be able to get these options? (Accept answers, then state). He must order, or specify exactly what he wants.

Today we will be writing specifications. You will be given precise instructions as to what your task will be. But first let us find out exactly what are specifications, why they are used, where they are used and how they relate to safety.

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*The curriculum concept is found in Teacher's notes.

"Writing Specifications"

Tasks

Lecture & Discussion:

Specification: A detailed precise presentation of something or a plan or proposal for something.

This is how a dictionary defines it. Let's go a little further. For safety reasons, a plate stating some maximum allowable weight is usually attached in an elevator. What would happen if that maximum weight should exceed by a great deal? (Cables may break, car may not move, car may fall to the basement). So you see a safe maximum allowable weight is specified. Name one other situation in which specifications are made for safety reasons. (Swimming pools: Do not dive a shallow end. Tire pressures: do not exceed maximum given).

It is important that you have some knowledge of specifications and their importance. Let's take the case of a water bed. If you decided to buy one, what information do you need about the bed? (Size, weight and proper care). Weight of bed, King - Queen - Single - What do you need to know about the house?(strength of floors).

An air conditioner designed to operate on 20 amps. obviously would not operate in an apartment where only 15 amps. is available. But you would be surprised how many times a mistake like this is made just because we are not fully aware of specifications. (More examples may be given, if needed, depending on students).

Specifications need not be restricted to safety. One may have to work with a limited amount of money and, therefore, buy a less expensive pen, coat, car, or house. Other factors are size, color, weather conditions, electrical characteristics or requirements, durability and purpose.

In order to meet your needs or specifications, you may choose to buy a Corvette instead of a Volkswagen.

Summary

Bring the discussion to a close and briefly summarize the main points made.

RESOURCES:

chalkboard

"Writing Specifications"

EVALUATION:

1. The student will provide six good reasons why specifications are important.
2. The student will describe how the skills of a specification writer can be used in other areas of the construction industry.

MUSIC

LESSON/UNIT	AUTHOR (s)	# OF LESSONS
The Piano Manufacturing Industry	Betty Harris	3
The Many Facets of Opera	Betty Harris	4
Music in Advertising I		1
Musical Criticism	Betty Harris	1
How to Accept Criticism	Betty Harris	1
Music as a Career	Betty Harris	1
Music in Advertising II	Betty Harris	1
Learning to Conduct a Successful Audition and Interview	Betty Harris	1
The Importance of Self Awareness and Attitudes on Success	Betty Harris and Michael Dunn	1

Music - Grades 9-12
"The Piano Manufacturing Industry"
Betty Harris

CURRICULUM CONCEPT:

To understand the study of the piano; its construction, evolution and present day role in music-making.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of the importance of the piano manufacturing industry for a musically oriented student in the New York area.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will list at least three musical and three non-musical careers associated with the piano construction industry.

ACTIVITIES FOR SESSION ONE:

Introduction
"In what way is the harpsichord different from the piano?"

Suggested Activity:
NOTE: This lesson has three parts and will include three days. The first day will prepare students for a field trip, the second day the field trip is taken, and the third day an evaluation is made.

Tasks
1. Students name various ways in which the two instruments are different; Style of construction, use in performance, resulting sound, etc.
2. Demonstrate the various parts of the piano to the class, eliciting from them whenever possible, the names and uses of the parts, (Ex: damper pedal, pinblock, etc.)
3. Play for the class brief examples of harpsichord and piano to show differences in sound. Elicit from students discription of sounds.
4. Begin to discuss what may be learned from a visit to a piano factory; questions to be asked, what to look for, etc.
5. Discuss the various careers that are involved in piano manufacture; identify ones that are musical and ones that are non-musical.

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* The curriculum concept is found in the teacher's notes.

"The Piano Manufacturing Industry"

Summary
Summarize what has been covered during the lesson and emphasize what can be most interesting and valuable on the following day's trip.

ACTIVITIES FOR SESSION TWO:

Introduction
Tour through piano factory
Discuss with students specific questions they might wish to ask manager, workmen or others either before, during, or at the end of the tour through the factory.

Tasks
1. Students observe carefully what is shown and explained to group and are ready to ask questions.
2. Discuss briefly with students at the end of day what was learned and ask them to collect their thoughts for thorough discussion in class the next day.

Summary
None provided.

ACTIVITIES FOR SESSION THREE:

Introduction
Class evaluation
Explain that many interesting aspects of the piano and piano manufacturing were seen on the trip and now a discussion will be held to compare impressions.

Tasks
Students are asked to choose one of the following activities depending upon their particular interests:
1) Draw some aspects of what was observed;
2) Write a short description of what was seen;
3) Make a list of musical and non-musical careers and write information learned about them - hours, salary, necessary skills and required background;
4) Draw a plan for a scientific principle exhibited in the manufacture of pianos;
5) Write an advertisement for this brand of piano.

Summary
Students show each other their completed projects and discuss together the listing of career implications as observed. The listing of musical and non-musical careers are placed on the board and discussed by the entire class.

"The Piano Manufacturing Industry"

RESOURCES:

1) Piano
2) Charts of mechanisms of piano and harpsichord, if possible
3) Library facilities for research
4) Recordings to demonstrate briefly sounds of harpsichord and piano
5) Piano factory or film of one
6) Speakers from factory staff

EVALUATION:

List at least three musical and three non-musical careers associated with piano manufacture.

Music - Grades 9-12
"The Many Facets of Opera"
Betty Harris

CURRICULUM CONCEPT:

To understand opera.*

RELATED CAREER EDUCATION CONCEPT:

To realize that the study of opera involves many interrelated and interdependent fields.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will identify the many fields involved in opera.
Career Awareness	2. The student will describe the life style of those involved in the arts in a musical and non-musical way.

ACTIVITIES FOR SESSION ONE:

Introduction

This is an instructional sequence which will encompass four days: preparation to attend an opera, the performance itself, and two follow-up lessons.

Show pictures of scenes from opera which picture lavish scenery costumes, etc. Ask class to consider opera as an all-inclusive art work, one that involves many occupational fields.

Tasks

1. Elicit from students the various other fields involved in opera in addition to music such as scenery design, costume design, painting lighting, choreography, dramatic arts, stage movement, literature, etc.

2. Discuss for a moment what opera would be like without any one of these fields. Stress that in opera the music, both instrumental and vocal, is only one component of the complete work which demands a real interdependency of workers fulfilling their various tasks.

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* The curriculum concept is found in teacher's notes.

3. Review with class main points to look for in a performance of Don Giovanni (or any other opera) to be seen the following day. (It is understood that the music and plot of the opera have just been studied by the class.)

4. Work with class to choose questions to be asked during a backstage tour of the Metropolitan Opera House. (Examples: How does the revolving state work? Who operates the central control board. What does the stage manager do? Who is in charge of rehearsals? What do the jobs of prompter, understudy and prop man consist of?)

ACTIVITIES FOR SESSION TWO:

Introduction
Review briefly the material covered in session one.

Tasks
1. The students attend a performance of the opera.
2. Either before or after the opera, they are taken on a backstage tour of the opera house, particularly the area of the control board, rehearsal stages, etc.
3. Students have the opportunity to question the tour guide and hopefully some of the stage personnel about their work--their exact tasks, hours, salary, etc.

Summary
Meet with the class briefly before leaving to summarize what was learned.

ACTIVITIES FOR SESSION THREE:

Introduction
Ask students to identify the various interrelated aspects of the opera which helped to make it a success.

Tasks
1. The class discusses the team effort of the many behind-the-scenes workers to make the performance possible.
2. The students pinpoint weak or strong aspects of the whole performance and discuss either how weak aspects might be strengthened or the effect a very strong component has on a performance.
3. Comparison of the fields should be made by the students. (For example: Did the scenery really set the mood for the Plot?" Was the acting as good as or better than the singing? Did the lighting enhance or diminish the effects of particular scenes, etc.)

Summary
Students will write a paragraph explaining the interrelationship of

disciplines as they saw them in practice in the opera. They should be instructed to show how the finished performance would have suffered without each particular component.

ACTIVITIES FOR SESSION FOUR:

Introduction
"Yesterday we discussed the contribution of many related fields in order to make an opera performance. We also discussed strengths and weaknesses of the performance we saw. Today we want to explore why all of these people with their individual careers want to coordinate their efforts in opera instead of pursuing them in other situations, which might be more likely."

Tasks
1. Elicit from students the fact that apparently the arts environment is desirable to the people working in opera-related careers, perhaps through a love of music.
2. Discuss the various life styles of both performers and other workers in opera, trying to stress the values they presumably hold. Ask students if they can identify with these values.
3. Assign roles to various students who then act out their job role in the production of an opera. (For example, the leading soprano, the stage manager, the conductor, the prompter, the ballet mistress, etc.) It must be understood that their monologues or dialogues must be concerned with their particular job and life style. Class questions may be entertained by the actors.
4. Students take a short quiz on recognition of careers involved in opera.

Summary
None Provided.

RESOURCES:

1. Metropolitan Opera House (or a film of any large opera house)
2. Performance of opera
   (Recordings or films of any opera can be used if a good live performance is not practicable.)

EVALUATION:

The student will indicate his achievement of the career education objectives by:
1. Identifying the many fields involved in opera.
2. Describing the careers involved, life styles, etc.
3. Taking a short quiz on recognition of careers involved in opera.

Music - Senior High
"Music in Advertising"
Betty Harris

CURRICULUM CONCEPT:

To understand the use of music in advertising.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of the important influence of music in many facets of advertising.

THEMES AND OBJECTIVES:

Themes	Objectives
Economic Awareness	1. The student will list various reasons why music is used in many facets of advertising.
Economic Awareness	2. The student will recognize, analyze and list the elements that make commercials successful.
Skill Competency	3. The student will construct at least one commercial which advertises some product or service.

ACTIVITIES:

Introduction

Play the portion of the William Tell Overture which is associated with the Lone Ranger. Elicit what immediate association they have when they hear the music. After students have identified their association with the music, ask if anyone knows the real title, composer, etc. Explain, if necessary, that the original music had nothing to do with the Lone Ranger and, indeed, had been written by Rossini in the last century.

Note: This particular example is given as one most students would probably still recognize. Any other contemporary theme song from TV or motion pictures could be substituted and would be preferred as long as virtually everyone in the class recognize it. It should also be played in the manner in which students are accustomed to hearing it.

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* The curriculum concept is found in the teacher's notes.

"Music in Advertising"

Tasks

1. "Why do you think this particular music was chosen to represent the Lone Ranger?" Qualities of the music are discussed by the students, such as the rollicking rhythm, exciting tempo, etc. "Would a piece of music written expressly for this character have been better?" Discuss the fact that any piece of music with similar characteristics would probably have been as effective.

2. Elicit from the students another way in which a particular piece of music represents someone or something. One answer should be in advertising. Explain that a theme song is, in essence, advertising.

3. Ask class why music is used in advertising. Reasons given by the class are listed on board and discussed. Some reasons may be:

   a) Music is appealing and makes an ad more interesting and "listenable."
   b) Words are easier to remember when combined with music, thus, the commercial message is recorded in the listener's mind, whether or not he wants to remember it.
   c) The music becomes associated with a product or service and if it is pleasant, agreeable music, the feeling carries over to the product, thus increasing sales.

4. It should be stressed that operative in all of these reasons is the mood-creating power of music. Perhaps nothing else can set a mood so strongly and quickly as evidenced in background scores for movies, TV, etc.

5. Play for the students various tapes or records of commercial jingles. Students analyze each one for its particular appeal. There will be some elements in common to all, such as a catchy tune, singability, brevity, and extremely precise and repetitive words. (Remember, an ad need not be likeable to be successful.)

6. Discuss these criteria for a commercial which might not hold true for any other type of composition.

7. Ask class what is the ultimate purpose of the commercial. Is it an esthetic one or is it designed simply to sell something? These choices should be discussed. For instance, a highly successful writer of commercials would probably not be a very good composer and vice versa.

8. "Now that you have heard, analyzed, and discussed musical commercials, it is time to construct one of your own, using whatever product or service you feel you could advertise well."

"Music in Advertising"

Summary

In preparation for the writing of musical commercials, students summarize the reasons for music in advertising and the criteria of a successful ad.

RESOURCES:

1. A tape or recording of the William Tell Overture (or any other music that is closely associated with a show or person).

2. A tape or recording of various musical commercials.

EVALUATION:

1. The students will list the reasons for the use of music in advertising.

2. The student will recognize, analyze, list and discuss elements which are common to successful musical commercials.

3. The student will construct their own commercials based on criteria discussed in class.

Music - Senior High
"Musical Criticism"
Betty Harris

CURRICULUM CONCEPT:

To understand the nature of musical criticism.*

RELATED CAREER EDUCATION CONCEPT:

To discover that the skills exhibited by a music critic involve analysis, balanced judgment, and clarity of a communication; the development of these skills would be valuable in many professions.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	1. The student will distinguish between reporting and criticism, given examples of each.
Skill Competency	2. The student will identify qualities of good journalism using the criteria of clarity, balance, correct grammar, etc.
Skill Competency	3. The student will list criteria for judging a musical performance, i.e., technical achievement, faithfulness to score, musicality, etc.
Career Awareness	4. The student will list advantages and disadvantages to the occupation of music critic.
Skill Competency	5. The student will critique a musical performance on the criteria discussed in class.

ACTIVITIES:

Introduction

Note: (This lesson should ideally follow a performance which the students have either attended or presented themselves.)

"Suppose for a moment that you were the only class member able to attend the performance yesterday. You are asked to listen very carefully and perhaps even make some notes on what took place so that you could then report to the class. In such a role - that of a musical reporter, it would seem - what are the items you should be most mindful of? In other words, what does it take to be a musical critic?"

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* The curriculum concept is found in the teacher's notes.

Tasks

1. Help students to distinguish between a reporter and a critic. They should realize that the reporter simply reports the event; the critic not only reports the event but, based on prior learning and listening experiences, makes a judgment of the performance. Ask them which type of article they would prefer to read. Which one is more helpful?
2. Elicit from students items they would consider essential to good journalism, whether reporting or criticism. List on board such criteria as clarity, correct grammar, useful information, etc.
3. Now discuss the actual subject of the journalism in this case: the musical performance. What are the criteria used to judge a musical performance? List on board answers elicited from students, e.g., technical control, poise, faithful interpretation of score, musicality, and expression. Discuss how these criteria may vary according to the type of performance one is hearing. (For example, a jazz soloist could not be judged on faithful interpretation of the score, etc.)
4. Read a sample review from a newspaper such as the New York Times. Ask students to identify items covered by the review and compare with the checklist on board. New items should be added.
5. Discuss briefly what type of training a critic must have, such as a musical education, experience in journalism, and a great deal of experience with musical performances. Ask of students: "Is he more a journalist or a musician?"
6. Read a sample of a report of a concert. Differences between this and the critical review should be stressed. The student should realize that the report is simply a chronicle of what takes place - location and time of concert, names of performers, etc. In some cases a social report of those who attended is given. Ask: "Which article is easier to write? Which one requires more training?"
7. Students should conclude that musical criticism requires a musically trained person who writes well and probably has some background in journalism. The musical reporter could simply be a journalist assigned to "cover" a performance.
8. "What type person would be attracted to a career in musical criticism? What would his lifestyle probably be like?" Name and list the drawbacks, e.g., moderate salary, working against deadlines, etc. Good points might be a) to exert influence over others, b) to have the opportunity to hear a great deal of music.

Summary

Have the students summarize the various points covered including:

"Musical Criticism"

1) differences between reports and critical reviews:
2) criteria of good journalism;
3) criteria essential to judge a musical performance;
4) advantages and disadvantages of being a music critic.

RESOURCES:

1) Critical articles from the New York Times or any other well-written paper or magazine.
2) A report of a concert from a newspaper or magazine.

EVALUATION:

Students will fulfill the related career education objectives by:
1) Writing a critique of a musical performance, using the criteria developed in class.
2) Writing in an additional paragraph whether or not they would personally enjoy being a music critic, based on advantages and disadvantages discussed in class.
3) Listing the criteria which could be used in identifying good journalism.

Music - Senior High
"How to Accept Criticism"
Betty Harris

CURRICULUM CONCEPT:

Musical criticism.*

RELATED CAREER EDUCATION CONCEPT:

The student will learn how to accept and use criticism.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	1. The students will enact career simulated situations portraying various ways to give and react to criticism.
Self Awareness and Attitudes and Appreciations	2. The student will write an essay in which he discusses his own personal attitudes on problems with criticism.

ACTIVITIES:

Introduction

"Recently we learned about the role of the music critic, the requirements needed for his job, and the skills that are involved. This was followed by our writing a critique of a performance. Today, we are going to bring the subject of criticism very close to home. Let's suppose that you are the one whose performance is being criticized. Do any of you enjoy being criticized by your teachers? your friends? your employer? Is there value in criticism?"

Tasks

1. Discuss these questions, developing the idea that, although it may be hard to take, there can be real value to hearing someone else's opinion, whether or not you agree with it.
2. "What kind of criticism is especially helpful?" Discuss the difference between constructive and destructive criticism. Stress the point that criticism works both ways and if one does not appreciate destructive criticism, one should not offer it either. Discuss briefly the effects destructive criticism may have.

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* The curriculum concept is found in the teacher's notes.

3. Discuss reactions positive and negative criticism may have.
4. Set up role playing situations built around criticism. After each situation has occurred, students comment, explaining how the criticism could be more helpful, more tactful, etc.
5. The following are examples of situations which the students act out imaginatively, using whatever kind of criticism they feel appropriate.
    a) A voice teacher criticizes a student. The student reacts.
    b) A music student criticizes a fellow student from his class after a performance. The student reacts.
    c) A conductor criticizes the first clarinetist in his orchestra during a rehearsal. The clarinetist and other members of the orchestra react.
    d) A musician has just made his debut. He is reading a review of his performance in the morning paper. He reacts first to a rave review, then to a very negative review.
6. Have students discuss the various situations and how the criticism might have been given in such a way that the person does not feel it is a personal attack. The reactions might also be discussed, particularly that of a person who feels attacked, even though the criticism was not so intended.
7. Hold a general discussion on the personal qualities one should develop to be able to withstand criticism which is always confronted by the musician. An individual feeling of self worth, and confidence, should be cultivated, as well as the ability to separate the value of the performance from the value of the person. (In other words, students must realize that criticism must not totally destroy them.)
8. Have students discuss these attitudes and give examples of their experiences with criticism.

Summary

1. The teacher will briefly reiterate the effects of criticism, particularly to a musician whose professional life is oftentimes dependent upon it.
2. The teacher explains that such a personal matter cannot be completely explored in one lesson, but it is a subject which must be continually dealt with and developed over a long period of time.

RESOURCES:

None

"How to Accept Criticism"

EVALUATION:

Students will satisfy the career education objectives by:
1) Role playing in which the problem of criticism are delineated;
2) Writing an essay in which they are able to express their personal feelings about the matter of criticism.

Music - Grades 10-12
"Music As a Career"
Betty Harris

CURRICULUM CONCEPT:

To understand the ramifications of choosing music as a career.*

RELATED CAREER EDUCATION CONCEPT:

To realize that the decision whether to pursue music as a vocation or an avocation is a vital one.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness and Attitudes and Appreciations	1. The student will distinguish between vocation and avocation.
Career Awareness and Economic Awareness	2. The student will identify the advantages and disadvantages of making music an avocation.
Self Awareness	3. The student will identify goals that are important to him in deciding whether to pursue a musical vocation.
Career Awareness	4. The student will identify attributes necessary for success in a musical career.
Career Awareness	5. The student will identify drawbacks that might be encountered in the pursuit of a musical career.

ACTIVITIES:

Introduction

"As music majors who have studied and worked in music for some time, how many of you would consider music a hobby? Or is it much more important to you than a hobby? Are hobbies of real importance?"

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* The curriculum concept is found in the teacher's notes.

"Music as a Career"

Tasks

1. Elicit from class definitions of "vocation" and "avocation". Discuss and have class distinguish between the two. Which has priority in one's life, etc?
2. Play an excerpt from Rimsky-Korsakov's Capriccio Espagnol. Ask class if this sounds like the work of a professional musician. After their response, explain that this was written by a Russian who besides being a composer, was a naval officer and, indeed, spent most of his life in the navy.
3. Ask class which was his vocation and which was his avocation. Explain that there are many musicians who support themselves in careers completely unrelated to music.
4. Elicit from students several reasons why someone might prefer to have music as an avocation, listing on board advantages and disadvantages. (Ex. - Advantages as a avocation:
    a. Other fields better paying
    b. Other fields more reliable
    c. Can enjoy music without pressures of making a living

   Disadvantages as an avocation:
    a. Spending a great deal of time away from music
    b. Working in a profession with a different life style
    c. Lack of satisfaction that might accrue from creating or performing music
5. Lead students into a discussion concerning the defining of goals. A clear, simple definition of what the student perceives as important to his adult life should become the end product of the discussion. It should be stressed at this point that a worthwhile viable goal for one person is not necessarily that for another person.
6. Once the goals have been arrived at and listed, students should consider whether their own personal goals are concomitant with a musical career.
7. List personal characteristics necessary to a successful career as a musician. (This will depend, of course, upon what type of musical career is contemplated).
8. Discuss and list the many drawbacks that one might encounter in developing a career in music. (Ex. - serious competition, lack of money for professional instruction, lack of employment possibilities.)
9. Ask class such motivating questions as: "Should the knowledge of these possible drawbacks stand in your way if you're really committed to a career?" "Should you consider yourself a failure if, after considering your situation, you decide against a musical career and choose another field or a related field?" These questions lead naturally to a discussion of values and priorities.
10. Closing questions might center around "How much of a sacrifice would you be willing to make for your career? Would you be sure that your sacrifice would be worthwhile in terms of your personal life?"

Summary

Have the students use library resources to research the life of one musician who was successful in another field as well as music (optional).

"Music as a Career"

RESOURCES:

1. Record of Rimsky-Korsakov's Capriccio Espagnol. (Or music by any composer who was successfully employed in another field, e.g. Charles Ives.)
2. If possible, career education charts concerning decision - making, etc.

EVALUATION:

The student writes a paragraph, based on the lists made in class, in which he identifies and assesses his own goals, lists advantages and disadvantages to a musical career in his own terms and discusses the pros and cons of music as an avocation.

Music - Senior High
"Music in Advertisement II"
Betty Harris

CURRICULUM CONCEPT

To learn how music is used in advertising.*

RELATED CAREER EDUCATION CONCEPT:

To become aware of the techniques and methods used to advertise through music.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will interview a specialist in musical advertising to learn exactly what the job entails.

ACTIVITIES:

Introduction
The guest speaker is introduced to the class by the teacher who explains that now that the students have worked on their own musical commercials, some of them are finding the subject increasingly interesting and in order to help them in discovering exactly what the requirements, activities, and responsibilities are of the musical advertiser, a guest has been invited who will be able to answer a great many of their questions because this is his field.

Tasks
1. The guest speaks to the students concerning his job, and, if possible, makes a presentation of some of his work.
2. Students ask questions which have been framed beforehand or which have occurred to them during the presentation. Questions should concern required training, importance of contacts, native ability, and working conditions, e.g., salary, hours, colleagues, etc.
3. Advantages and disadvantages to a career in advertising for the musician should be investigated through questioning.
4. If time permits, students should perform their commercials for the guest, inviting his comments.

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* The curriculum concept is found in the teacher's notes.

"Music in Advertisement II"

Summary

As a summarizing activity, students will write a report of the interview as though they were reporters for the school paper.

RESOURCES:

Guest speaker who is well acquainted with the field of musical advertising.

EVALUATION:

1. Student will prepare questions to ask a guest speaker about the field of musical advertising.
2. Student will summarize and consolidate information learned by writing a report of the interview.

Music - Senior High
"Learning To Conduct a Successful Audition and Interview"
Betty Harris

CURRICULUM CONCEPT:

To understand the important aspects of the audition and interview.*

RELATED CAREER EDUCATION CONCEPT:

1. To become aware of the skills and attitudes necessary to taking a successful audition and interview.
2. The student will enact audition and interview situations to provide useful experience in these activities.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	1. The student will be able to list seven things that should be done in order to have the most successful interview possible.

ACTIVITIES:

Introduction

"As music students, most of you spend a great deal of time performing your skills and refining your talents. It is very important then to be able to display these skills in the best manner possible, when necessary. Nervousness at an audition can deprive one of a job, a better position, one's self-confidence at least temporarily, and so forth. Therefore, it is very much worthwhile to perfect the techniques and skills which may help to display your talent in a positive way."

Tasks

1. Discuss as an opening activity situations which the students have experienced at auditions and their feelings about them.
2. Have students begin to identify what they could have done to make the audition situation better. Suggestions might be such things as A) better preparation, B) more appropriate selection of music C) more poise and self-confidence, D) more positive attitude, D) better appearance.
3. Have students discuss reasons why these things are important.

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* The curriculum concept is found in the teacher's notes.

They should realize that anything that acts against their performing well is an obstacle which should be eliminated or corrected.

4. Extend the discussion of the audition into the area of the interview as well. In most cases an audition also includes at least a short interview. Determine with the students what questions a prospective employer might ask. While it is true that one's talent will no doubt be the most important element, there are other considerations as well which might be ascertained from an interview. What would some of these be?
5. The following items should be elicited from the class and listed on the board, such as cooperation, appearance, willingness to work hard, ability to work with others, attendance and punctuality habits, honesty, etc.
6. Valuable techniques of taking an interview should, of course, be employed here. These should be elicited from the class, and listed, e.g. use of good grammar, clarity of expression, defining of goals, etc.
7. "How important is one's appearance at an audition or interview?" Discuss this with students and try to establish some criteria for appearance. It should be decided through discussion that grooming and cleanliness are the most important aspects of appearance, not necessarily new or expensive clothes. It should be mentioned that even those who are interested primarily in playing in pop groups for which dress might not seem important, should still consider appearance, perhaps in this case appropriateness of dress to fit in with the group.
8. Present a particular problem to the class. "What about a situation in which the auditioner makes constant excuses for himself or his playing. How would you as the interviewer feel about this? What would you recommend to a student going for an audition?" Discuss with the class the desirability of not making excuses unless the reasons are of overwhelming importance. It should be a valuable lesson for the student to realize that he must try to do his best no matter what the disadvantages are under which he is working.
9. Explain that the attitude of the person taking the audition is of vital importance. He must not regard the person interviewing him as an enemy, but as someone who needs his skills and is perhaps dependent upon them. On the other hand, one cannot exude overconfidence either. A simple attitude of quiet confidence and cheerfulness is perhaps best.
10. Assign students roles in simulated audition or interview situations. If possible, students can bring their instruments or use the piano as an audition instrument. Examples of both good and bad audition/interviews should be given.
11. After each example of role playing, students analyze what has taken place, and give helpful advice to both participants. (It should be noted in passing that there are skills involved in interviewing someone also.)

"Learning to Conduct a Successful Audition and Interview"

Summary
A list of Do's and Don't's should be listed as a result of what has been enacted. Some might be:
A) Be well prepared with music and instrument
B) Be well groomed
C) Be polite
D) Use good grammar
E) Have a positive approach
F) Go to interview/audition alone
G) Don't chew gum
H) Don't talk too much

RESOURCES:

None

EVALUATION:

1. Students are able to identify important skills involved in taking a successful audition or interview.
2. Students simulate through role playing an audition or interview situation to provide useful experience and to show attitudes.

Music and English - Grade 12
"The Importance of Self Awareness, and Attitudes in Success"
Betty Harris and M. Dunn

CURRICULUM CONCEPT:

To help the student to discover the degree of dramatic correlation between Othello and Otello as developed by Verdi and his librettist, Boito.*

RELATED CAREER EDUCATION CONCEPT:

Given the model of Othello, the student will become aware of how self-depreciation, insecurity, and inability to assert oneself may result in exploitation by society.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	1. The student will identify human qualities, e.g. jealousy, passivity, etc., in main characters.
Attitudes and Appreciations	2. The student will identify motivating forces behind these characters and speculate on probable causes of these forces.
Skill Competency	3. The student will enact roles from the opera and transfer them to current situations.

ACTIVITIES:

Introduction
(Note: It is assumed that Othello has already been taught in English class. The previous day, a lesson has been taught about the setting of mood in the opening scene of Otello. Therefore, the class is acquainted with Verd's style.)

Play Iago's first aria. Elicit from the class from their knowledge of the play, who is singing and what the situation probably is.

Tasks
1. Discuss whether the music really characterizes this speech and

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* The curriculum concept is found in the teacher's notes.

personality (Note: Some student may feel that the music does not reveal Iago as he had pictured him. This should be dealt with in terms of familiarity with style: this is how Verdi revealed Iago at this moment. If this does not answer the problem it should be accepted. For this student the correlation between drama and music is not very high at this point.)

2. Discuss Iago as a character. What are his motivations? Why? Do you know anyone like Iago?
3. Continue in the same fashion by playing representative samples of arias by Otello and Desdemona, particularly the "Willow Song" and "Ave Maria." Discuss the correlation, motivations behind the characters, and probable reasons.
4. Ask students to imagine for the moment that they are Boito, the librettist. Are there any portions of Shakespeare's Othello that you would delete from an operatic representation? Why? Give a brief discussion of what is needed for good opera: dramatic conflicts, intense emotions, larger-than-life characters.
5. Assign roles to various students, e.g. Othello, Desdemona, Iago, possibly Cassio. The role playing should be done in a style which permits asides to the audience, thus allowing the characters to reveal their inner motives.
6. Bring the situations up-to-date and assign present-day situations to students. The interactions among them should reveal personality defects, such as insecurity, jealousy, passivity, etc., so that students can see that the same motivations that activated the plot of Otello are operative in our own lives constantly. It is how one deals with conflicts among diverse personalities that results in positive or negative experiences and the ability or inability to work with others who may be motivated by completely different goals.

Summary
Have students summarize orally the points covered in the lesson, pointing up the degree to which the music is faithfully representing the characters and their situations. The three main characters and their dominant traits should also be summarized.

RESOURCES:

Recording of Verdi's Othello

EVALUATION:

1. The student will list the main characters in Othello and identify their strongest apparent human qualities such as jealousy, etc.
2. The student will give his opinion regarding the underlying forces behind strong "personality forces".

"The Importance of Self Awareness, and Attitudes in Success"

3. The student will act out his favorite character in a part which gives him the opportunity to display strong emotions.

WORLD OF WORK COURSE

Lesson/Unit Title	Author	No. of Lesson
Goals for Integrating the World of Work Course with the English and Social Studies Courses	Lucy Becker Muriel Daniel Heddy Geller Armand Valentinetti	1
The Dignity of Labor	Muriel Daniel	1
Self Awareness for Job Success	Muriel Daniel	
Value Exploration	Armand Valentinetti	1
Field Trip to Explore Occupations	Muriel Daniel	3
Career Opportunities in Retailing	Armand Valentinetti	3
Exploring Entry Level Jobs - Retail Sales Person	Muriel Daniel	1
Career Opportunities in Insurance	Armand Valentinetti	4
Career Opportunities in Banking	Armand Valentinetti	4
Exploring Office Worker's World	Muriel Daniel	1
Entry Job - Cleaning Industry	Muriel Daniel	1
Sources of Employment	Muriel Daniel	1
Using Want Ads as Job Resource	Muriel Daniel	1
Researching Job Choices	Muriel Daniel	1
How to Get a Job (Job Sources)	Armand Valentinetti	2
The Job Interview	Armand Valentinetti	1
Personal Effectiveness on the Job	Muriel Daniel	1
Getting Along on the Job	Muriel Daniel	1
What Your Fellow Workers Expect out of You	Armand Valentinetti	1
Establishing Good Work Habits	Armand Valentinetti	1
An Adult Responsibility: Managing Money	Muriel Daniel	1
Reading Your Paycheck - Social Security	Muriel Daniel	1
How to Spend Your Money Wisely	Muriel Daniel	2
Contracting for Goods and Services	Muriel Daniel	5
World of Work Course Goals	Bernard Kaplan	
You and the World of Work	Bernard Kaplan	1
Who Are You	Bernard Kaplan	2
What Good is School	Bernard Kaplan	1
The Whole Truth	Bernard Kaplan	1

World of Work Course - Senior High
"Goal for Integrating the World of Work Course with the English and Social Studies Courses"

Lucy Becker
Muriel Daniel
Heddy Geller
Armand Valentinetti

I. Understanding who you are.

- A. Abilities
    - 1. verbal
    - 2. spatial
    - 3. mathematical
    - 4. artistic
    - 5. creativity
- B. Interests
    - 1. people
    - 2. things
    - 3. ideas
- C. Values
    - 1. money
    - 2. power
    - 3. fame
    - 4. family
    - 5. humanism
    - 6. aesthetics
    - 7. prestige-social
- D. How to be personally effective
    - 1. appearance
    - 2. communication-English curriculum
    - 3. moral values: i.e., responsibility, loyalty, honesty
    - 4. evaluate what you have to offer

II. Importance of work in setting life and leisure styles.

- A. Definition of life styles
    - 1. examples
- B. Utilize students' experience
- C. Dispelling misconceptions of life styles
- D. Comparing and contrasting life styles of different occupations and careers-Social Studies curriculum

III. An experimental approach to exploring the variety of careers and occupations available in society.

- A. Method: Primary source, bringing the world of work into the classroom and taking the class into the world of work.
    1. guest lecturers
    2. field trips
    3. films
    4. tapes

- B. Secondary resources
    1. school library
    2. government pamphlet
    3. text
    4. newspapers

IV. How school subjects build the foundation needed in world of work.

- A. Skills

- B. Attitudes

- C. Learning the effective tools of business communication.
    1. grammar
    2. usage
    3. vocabulary
    4. spelling
    5. pronunciation

- D. Literature
    1. experience vicarious life styles
    2. gaining a perspective through literature that molds attitudes towards people and situations.

- E. Understanding how geographic factors influence the country's economy and the individuals.

- F. The role of government in the world of jobs/work.

- G. Ethnic and religious factors influencing the world of work.

V. How to use educational background, innate ability and information to be successful in the world of work.

- A. What the employer expects of you.

- B. The interview - questions you can ask.

- C. Resume and letter of application.

- D. How to fill out the printed application.

E. How to take tests: company tests, civil service exams.

F. How to function on the job once you've gotten it.

G. Advantages of part time work while still a student.

TEXTS USED: World of Work:

World of Work - Kimbrell and Vineyard
Occupations Outlook Handbook

English:

Warriners
A Midsummer Night's Dream - Folger
Effective Communication in Business (Aurner and Wolf) - worksheets
Values Clarification - (Simon, Howe and Kirschenbaum) - worksheets
Word Wealth

Social Studies:

The Afro-Asian World - A Cultural Understanding
Edward Kolevzon (Allyn & Bacon, 1969). Boston.

SUGGESTED FIELD TRIPS:

1 - J.C. Penney
2 - New York Times - English
3 - City of New York, 139 Center Street
4 - Preview of show - English
5 - United Nations - Social Studies
6 - Museum - to see African artifacts
7 - Modern factory
8 - Insurance Company
9 - Savings bank

SUGGESTED RESOURCE SPEAKERS:

1 - Recent alumnus working as typist
2 - Speaker from Income Tax Bureau
3 - Insurance Company recruiter
4 - Personnel manager - English
5 - People involved in production of play - English
6 - Members of community to discuss jobs and life-styles associated with them - English
7 - Diplomat from one of the areas studied
8 - Museum curator
9 - Factory worker or foreman
10- Savings bank personnel manager

Curriculum By Course Area*

World of Work	English	Social Studies
I. Self Exploration before entering World of Work. A. Tests Administered 1. Verbal 2. Math Ability 3. Psychological readiness a. values b. interests c. desires	1. Principles of Composition A. Use of topic sentences with self-awareness concepts 2. Verbal tests 3. Self-exploration through literature 4. Values clarification exercises	1. Values of the tribe as compared to our society 2. Communication needs of other societies 3. Value Exploration a. Communist society b. Middle East 1. from ancient to modern times
II. Opportunities available for entry level jobs. Exploration of career opportunities of New York City. A. Garment Center B. Retailing C. Financial D. Civil Service E. Health	II. English language skills A. Most valuable job tools (grammar, spelling, vocabulary, usage) as used by secretary, retail salesperson, stenographer, typist B. People on the job 1. field trip - New York Times C. Jobs in the theatre world (actor, director, costume designer, etc.) 1. Midsummer Night's Dream D. Architects of language 1. diagramming of sentences 2. discuss jobs involving the use of maps, diagrams, and blueprints E. Lifestyle associated with jobs.	II.A. Lifestyles of peoples in 1. Africa 2. Soviet Union 3. Middle East B. Influences on Life Style 1. climate 2. topography 3. resources C. Career choice 1. Influence by geography 2. Influence by government 3. Influence by historical development
III. How to get the job A. Job sources B. Mechanics of getting job 1. Writing letter of application a. How to write a personal resume 2. Filling out application blank 3. Conducting job interviews	III. Principles of Effective Communication A. Resume writing B. Writing a letter of application C. The job interview D. Vocabulary and spelling relevant to World of Work	III. How people enter the labor force in different societies A. Demands of education B. Different levels of adult responsibility and maturity C. Government role in career choice 1. Soviet Union 2. Developing countries

* Please note the lessons for Social Studies and English are found in other parts of this guide.

World of Work	English	Social Studies
4. Questions to ask of employers a. fringe benefits b. working conditions c. advancements		of the world
IV. How to get along on the job A. What you expect of fellow workers B. What your fellow workers expect of you C. Responsibilities to the job that insure success	IV. Gaining insight into human nature A. Interpersonal relationships explored through literature 1. Midsummer Night's Dream 2. Collateral readings	IV. World Understanding 1. Knowledge and appreciation of different attitudes and interests fostered by other cultures 2. Cooperation needed in tribal community 3. Kibbutz society 4. Collective 5. How different individuals function on jobs in different communities
V. You as a wage earner A. How to budget your money B. How to be a smart consumer C. Checking account D. Payroll forms 1. W-2 forms 2. FICA 3. Local taxes 4. Pension, hospitalization, etc.	V. The language of adult responsibility in the working world A. Vocabulary B. Spelling	V.A. The role of the worker in the three areas covered B. The worker's obligation to government in each society C. Changing values of the working man
VI. Effective utilization of the following three years of high school to insure success in the World of Work A. Selection of courses B. Establishing good work habits, attendance, punctuality C. Using our knowledge of self acquired this term to perfect "saleable" skills and attitudes	VI. Combining English skills and self-awareness to function more successfully in the World of Careers	VI. Social consciousness of other lands and other mores as a source of understanding both self and others. Direct Application - Being more personally effective with a wider group of people in the less sheltered environment of working world.

World of Work Course - Senior High
"The Dignity of Labor"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To believe that all labor has dignity.
To believe that the self-image need not be diminished by the so-called humble job.
To describe how work provides the opportunity to develop the whole individual.

THEMES AND OBJECTIVES:

Themes	Objectives
Attitudes and Appreciations	Given an occupation, the student will describe the task performed and why this task is important.
Attitudes and Appreciations	The student will describe why he thinks people adopt fancy titles for what they do.
Career Awareness	Given an occupation and an individual's interest which conflicts with the occupation, the student will identify another occupation using similar skills which also allows the individual to use his interest in the job situation.

ACTIVITIES:

Introduction

Discuss with students the aim of the lesson.

1. To explore our "feelings" about certain jobs.
2. To show the necessity of these jobs in our social structure.
3. To see how the importance of the job contributes to society and how the optimum performance of any job defines "the dignity of labor" motivation.

Tasks

1. Place on the board or a worksheet ten occupations and ask students: If you obtained a job as a __________________, what would you be doing? Have students use a dictionary to develop definitions.

"The Dignity of Labor"

Occupation	Definition of Job
a) Comestible consultant	
b) Sanitary engineer	
c) Domestic director	
d) Piscatorial purveyor	
e) Automotive adjustor	
f) Communication expediter	
g) Inventory invoicer	
h) Tonsorial expert	
i) Custodial engineer	
j) Transportation consultant	

2. Note how often the titles of individuals above are fancy titles for the following tasks:
   a) work in grocery
   b) Garbage man
   c) Maid
   d) Fish monger
   e) Work in gas station
   f) Messenger
   g) Stock clerk
   h) Barber
   i) Janitor
   j) Token booth in subway

   Ask students to discuss why individuals adopt fancy titles for what they do. (i.e. The need for peoples approval, social approval.)
3. Present situations to the students which show the importance, the need society has for what the worker is doing.
   What if:
   a) Your sink is stopped and your plumber has closed his business to pursue a career as a civil engineer.
   b) The garbage men went on strike.
   c) The maintenance staff at school quit.
   d) The fish store owner hung a sign up "Gone Fishing".
4. Discuss with students the fact that often workers get dissatisfied with their work because their main interest or hobby has minimal relationship to the job he has. Provide the students with situations in which an interest and job conflict and have students identify a possible occupation in which the skills and knowledge of the first occupation could be used along with the interest in alternate occupation.

   What would you recommend to someone who:
   a) loves the outdoors - works as a bookkeeper.
   b) enjoys tinkering with his car - works as a stock clerk.
   c) enjoys building models or painting - works as a salesman in a furniture store.
   d) spends his spare time leading a golden-age-club - works as a computer operator.

Summary

Review the three main focal points of the lesson with the students.

EVALUATION:

1. Describe in a paragraph why is the flagman on road repair jobs important.
2. Explain in a paragraph why people adopt fancy titles for what they do.
3. Recommend an alternate occupation which will allow both the skills of the job and the interest to be used - the individual loves to walk and exercise. The individual works at a sewing machine making mens' sport shirts.

World of Work Course - Senior High
"Self Awareness for Job Success"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To become aware of one's interests and needs.
To describe how positive interest influence job satisfaction.
To make career choices based on interests and avoid jobs that conflict with interest.

THEMES AND OBJECTIVES:

Themes	Objectives
Self Awareness	Given a list of interest and needs, the student will identify those which are strong personal interests.
Self Awareness	The student will list three occupations which are in harmony with his expressed interests and needs.

ACTIVITIES:

Introduction

1. Use the following motivational device to start with: "Jane, you look great in that blue dress!" "Jim, that was an excellent book report!" As class observes obvious elation or satisfaction of two students singled out for praise, teacher's opening question: "What do people need in addition to food, clothing and shelter?" Should elicit obvious reply "praise", "being appreciated", "being noticed", etc.
2. Solicit student "needs" and "reasons". List on board. List and discussion will result in class's realization that we have different needs. Fulfilling needs gives a person satisfaction. Satisfaction on job will enhance positive attitude toward job which will result in your best performance on job.
3. Discuss main intent of lesson--to show how positive interest in the job you're doing guarantees success in the world of work.

Tasks

1. Have students discuss:
   What are the satisfactions peculiar only to the work environment? Let's explore some work satisfactions that heighten interest. (Mimeo list below can serve as evaluations and opening motivation for next lesson which would be "kinds of work we need to sustain interest and make us happy").

Individual Needs and Interests Inventory

Directions: Put a "+" in front of the idea if you are very interested or have a strong need. Put a "-" if it is not a strong interest or need.

____working indoors
____working with words
____working with numbers
____working slowly
____working with hands
____working for small firm
____working with women
____working with men
____working with things
____traveling as part of your work
____not being responsible
____telling others what to do
____talking to co-workers
____being able to move about
____always knowing what's next
____making decisions
____being creative, original
____being honest
____running occasional risks
____being promoted
____working by yourself
____working for large company
____working in a beautiful place
____hearing music at work
____feeling safe from accidents
____being sure of the job
____being rated
____being praised by superior
____seeing where my work fits into company plan

2. Next have students take the things they need and write a paragraph in which they explain more fully why they have the needs chosen. Paragraphs read to the class can be extended to "individual needs." Pupils will realize that their needs from the evaluated "interest inventory" can channel their career on job goals.

Chart For Evaluating Yourself

I. Body
   A. Appearance
      1) sex
      2) size
      3) shape
      4) color
      5) neatness
   B. Dexterity - for all characteristics consider
      1) aptitude
      2) skill
   C. Power — Together they measure
   D. Endurance — general state of health

II. Mind
   A. Alertness
      1) strength
      2) scope — of attention
      3) speed
      4) persistence

- B. Memory
  - 1) people
  - 2) ideas and explore combination in situations
  - 3) things
  - 4) numbers
- C. Imagination and foresight (same as above)
- D. Comprehension
  - 1) accurate
  - 2) inclusive observation
  - 3) penetrating understanding
- E. Precision - exact distinctions
- F. Application
  - 1) selectivity
  - 2) logic
  - 3) penetration
  - 4) integration
- G. Ability to carry load
  - 1) amount
  - 2) endurance

III. Personality
- A. Self control
  - 1) emotional maturity
  - 2) integrity
  - 3) persistence
- B. Desires
  - 1) tastes
  - 2) standards
- C. Contacts or personal effectiveness
  - 1) response to others
  - 2) impression on others

3. Using the workscope charts, have students research three different jobs that utilize their interests

Summary
Review the main focus of the lesson with the students.

EVALUATION:

1. Provide students with the list used in Task 1. and have them re-identify their strong and not so strong interests and needs.
2. Have students identify three occupations which are in harmony with those needs.

World of Work Course - Senior High
"Value Exporation"
Armand Valentinetti

CAREER EDUCATION CONCEPT:

The student will recognize the relationship of interest, aptitudes and achievements to the realization of career goals.

THEMES AND OBJECTIVES

Themes	Objectives
Self Awareness	The student will identify his career goals in terms of interests, aptitudes and achievements (initial values exploration).

ACTIVITIES:

Introduction

1. Discuss the aim of the lesson -- How do we encourage students to initially think of themselves in relation to the World of Work?
2. Show pictures of people at work in different occupational areas. Encourage them to imagine how they might fit into some of these occupational areas.

Tasks

1. Have students make a list of three things they do well.(5 minutes). (Note: Encourage students to utilize a wide range -- hobbies, part-time jobs, sports, etc.)
2. Have students make a list of three things they like to do (5 minutes). (Note: Encourage students to utilize a wide range -- hobbies, sports, part-time jobs, etc.)
3. Have students describe the one greatest thing (achievement, success, etc.) they have accomplished (5 minutes).
4. Have the students take the things they like to do, things they do well and their achievements, and identify career choices in which they could use these talents.

Summary

What values can be related to career goals?
a. interest (like to do)
b. aptitudes (do well)
c. achievements (success)

RESOURCES:

Text, World of Work, Kimbrell-Vineyard. Photos, slides of occupational representation, overhead projector.

EVALUATION:

The student will select a career goal (occupation) and write an essay evaluating it as respects his/her interests, aptitudes, and achievements. (Note: Essays to be part of group discussion in the next lesson.

World of Work Course - High School
"Field Trip to Explore Occupations"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To explore the possibilities of working for the City of New York.

THEMES AND OBJECTIVES:

Themes	Objectives
Career awareness	The student will describe the organization of City Government.
Career awareness	The student will list the names of various city agencies and describe their functions.
Decision making skills	The student will list criteria suitable for exploring work possibilities.

ACTIVITIES FOR SESSION ONE:

Introduction

Many of you are planning to work for the City of New York. Why have you chosen civil service as a career goal? Elicit: (a) security, (b) fair hiring practices, (c) advancement, (d) largest employer--good chance of getting job.

Tasks

1. We are visiting the Finance Department at 139 Center Street next week. To have a better picture of the Finance Department's role in government, let us survey how city government is organized. Who is elected head of city? What are city boards? Name city offices that facilitate operation of city.

Mayor

Appointed Boards
a. Planning and Zoning
b. Board of Examiners
c. Appeals

Appointed Offices
a. city attorney
b. Police Magistrate
c. sanitation head
d. planner

City Manager
a. City Clerk
b. Superintendent of Water
c. Director of Finances
d. City Engineer

2. What are some important agencies that a large city like New York needs to manage the different services of the city?

"Field Trip to Explore Occupations"

Department	Function of Department
1. Civil Defense	operating city during emergency
2. Finance Department	city budget
3. Procurement Department	buying goods, services
4. Law Department	legal responsibility of city
5. Collections Department	taxes, licenses, parking meters
6. Commerce Department	attract industry, city in business
7. Fire Department	fire fighting service
8. Licenses and Inspection Department	all licenses issued
9. Police Department	city protection
10. Public Health Department	operation of hospitals, protect health

Note: Compile a list of other departments important in city government.

3. Students list on board other city departments:
   - For each of the departments in the city list a function.
   - For each of the departments list employee interest noted.

11. Public Property	city real estate operations
12. Records	records, deeds, historical meaning
13. Recreation	parks and playgrounds
14. Streets	paving, lighting, maintaining
15. Water	purified, stored, charged to consumer
16. Public Welfare	credentials for public assistance
City Department	
17. Personnel	
18. City Comptroller's office	
19. District Attorney's office	
20. City Planning	
21. Redevelopment authority	
22. Mayor's office	
23. Sanitation	
24. Transportation	
25. Public Affairs	

4. Have students compile ten questions you will ask guide at Finance Department. Elicit:
   a. What does it cost to run the city?
   b. How does the city stay within its budget?
   c. Exactly what does the city spend its money for?
   d. Where does the money come from?
   e. How much money does the city have in the bank?
   f. Does the city borrow money? Where?
   g. Does the State or Federal Government give the city any money?
   h. How do they decide on how much we get?
   i. What city agency uses the most money?
   j. How many workers are hired by the Finance Department?
   k. What are some of the jobs?
   l. Are there openings now?
   m. What skills do we need to get a job?
   n. Is there an education or age requirement?
   o. Opportunities for advancement?
   p. Where will we find out about tests given?

"Field Trip to Explore Occupations"

Each student should compile answers, to be used for answers to essay question on unit test.

Summary

Review the major intents of the field trip with the students.

ACTIVITIES FOR SESSION TWO:

Introduction

Quickly review with the students the purpose of the field trip and the questions they plan to ask. Prepare a tentative route plan of interesting sites to see on the trip to and from the destination. This should assist with discipline problems.
Make plans with the students for ways of documenting the field trip.

Tasks

During the field trip assist the students in asking questions about the worker's job. For instance,

1. physical requirements,
2. attitudes required,
3. worker conditions,
4. training and education needed, and
5. interdependency of workers.

Summary

Have students prepare the answers to their questions for the next session.

ACTIVITIES FOR SESSION THREE:

Introduction

Ask for a few answers that the student received on their field trip. Then tell students that they have a choice of an activity to describe what they learned on the trip.

Tasks

Set up several approaches to how the student can summarize their experience on the field trip. This could include: art project, reports, creative writing exercises, a skit, discussion sessions, etc.

Summary

Review with the students the main purpose of the three lessons.

RESOURCES:

1. Trip to Finance Department of the City of New York
2. Yellow Pages of Learning
3. Results of tests and interest inventories provided by class.

"Field Trip to Explore Occupations"

EVALUATION:

Full period test on organization of New York City Government. Choose ten departments, give functions of each. Give ten functions, list the departments that are in charge. Write profile on skills and abilities needed to work in the Department of Finance based on our lessons and field trip.

World of Work Course - Senior High
"Career Opportunities in Retailing"
Armand Valentinetti

CAREER EDUCATION CONCEPT:

To be aware of opportunities available for entry level jobs and how to explore career opportunities of New York City in retailing.

THEMES AND OBJECTIVES:

Themes	Objectives
Career awareness	Students will describe what retailing offers: a. As an employee, working conditions, etc. b. As a career: variety of jobs, etc.

ACTIVITIES FOR SESSION ONE:

Introduction

1. Discuss with students aim of lesson -- what retailing offers as a career.
2. Show class a dollar bill. Ask
   a. How do we earn money?
   b. What opportunities for earning money are available to you in New York City?

   Ring cash register and ask:
   a. How can stores help you earn money?

Tasks

1. Have students list questions to be asked in field trip as relates to what retailing offers:
   a. as an employee: working conditions, hours, skilled vs. unskilled
      - type of question: Is there a tuition refund program?

   b. as a career: one of the largest employers in New York City; careers for women, etc.
      - type of question: Is it company policy to promote from within?
2. Have students interchange list of questions to produce valid and relevant format as regards retailing--employee and career.

Summary

Review questions listed by students as to relevancy to what retailing offers as an employee and as a career.

ACTIVITIES FOR SESSION TWO:

Introduction

1. Review with students procedures for the field trip to local department store.
2. Elicit the extent of student contact with department stores. Ask students to describe experiences as a customer or part-time employee.

"Career Opportunities in Retailing"

Tasks
1. Students will observe department store environment, physical layout.
2. Students will observe on-the-job performances.
3. Students will ask questions listed when appropriate.
4. Students will observe customer-employee relationships.

Summary
Have students arrange notes (both mental and written) as regards basic objectives of field trip--what retailing offers, as an employee, as a career.

ACTIVITIES FOR SESSION THREE:

Introduction
1. Discuss aim of unit and the day's lesson.
2. Have students conduct a mock field trip interview--one student plays employee and a couple of students ask questions.

Tasks
1. Based on the field trip have students express their thoughts on the following: (a) working conditions, wages, hours, etc., (b) opportunities for skilled and unskilled.
2. Based on field trip have students express their thoughts on the following: (a) largest field for career opportunities, (b) greatest variety of jobs, (c) attractive to those who like people, (d) careers for women

Summary
Review the following two points of the unit.
1. What does retailing offer you as an employee?
2. What does retailing offer as a career?

RESOURCES:

1. World of Work, Kimbrell and Vineyard
2. Field trip to local department store - Brooklyn
3. cash register
4. dollar bill.

EVALUATION:

Students will write a 300 word essay describing what retailing offers: as an employee - working conditions, etc. - and as a career - variety of jobs, etc.

World of Work Course - Grades 10-12
"Exploring Entry Level Jobs - Retail Sales Person"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To describe some of the available entry level jobs in the area of Retail Sales.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will list various places of employment available to a retail sales person, and identify various tasks required.
Skill Competancy	2. The student will demonstrate various job activities in retail selling.
Educational Awareness	3. The student will describe training and personal qualifications needed to obtain selling job.
Self-Awareness	4. The student will decide his interest in selling.

ACTIVITIES FOR SESSION ONE:

Introduction:
We have all observed salespeople on the job from the other side of the counter. What are some of the jobs a sales person must do?

List typical tasks performed by sales people.
1. Sell merchandise or service
2. Answer questions
3. Demonstrate use of product
4. Make out sales slip
5. Receive cash payment
6. Make Change
7. Handle return or exchange of merchandise
8. Keep selling area neat
9. May order merchandise
10. May stock shelves
11. May prepare displays

"Exploring Entry Level Jobs - Retail Sales Person"

Tasks

1. Ask students:
    a. What type of businesses hire retail sales people?
        List:
            1.
            2.
            3.
        Tasks performed:
            1.
            2.
            3.
    b. What tasks are common to all of these people?
    c. What tasks are different?
2. Divide the class into appropriate groups to role-play sales people at work. Role-play the following:
    a. Waiting on customers
    b. Describing product (in conjunction with English)
    c. Persuading customers to purchase product (in conjunction with English)
    d. Answering questions
    e. Operating cash register
    f. Making change
    g. Making out sales slip, credit slip
    h. Totaling purchases, figuring discounts, tax
    i. Making displays
    j. Being polite to angry customers

    After role-playing, have class list information included in a "sales training" program conducted by a retailer.
3. Then have students consider the following:
    a. What qualities would an employer look for in hiring a retail sales person?
    b. What are the differences between the average and the very successful sales person?
    c. What factors should be present before you decide on a career in selling?
    d. Do you think you'd like selling as a career?

Summary

None provided.

RESOURCES:

Fundamental Salesmanship - Ernest & DaVal
World of Work - Kimbrell-Vineyard

"Exploring Entry Level Jobs - Retail Sales Person"

EVALUATION:

1. List five places on Flatbush Avenue that employ retail sales people to sell merchandise.
2. List three places on Flatbush Avenue that sell service.
3. What store in our area has effective sales help? Why are they effective?
4. What store in our area has sales people that turn you off?
5. Why would you judge a store by its sales people rather than by its merchandise?
6. Define the training and personal qualifications needed to obtain and keep a selling job.
7. Describe your interest in selling.

World of Work Course - Grades 10-12
"Career Opportunities in Insurance"
Armand Valentinetti

CAREER EDUCATION CONCEPT:

To understand opportunities available for entry level jobs and to explore career opportunities of New York City in the area of insurance.

THEMES AND OBJECTIVES:

Theme	Objective
Career Awareness	The student will describe what insurance offers as an employee, working conditions, etc., and as a career, variety of jobs, etc.

ACTIVITIES FOR SESSION ONE:

Introduction:

1. Discuss aim of lesson - what insurance offers in the way of a career.
2. Demonstrate in front of class a light to burn a paper replica of a house. Ask the question:
    a. How can this house be replaced? (Repair? Rebuild? Who provides money?)
    b. Who arranges to insure the house? (Underwriter, broker.)

Tasks

1. Provide students with copies of job descriptions of insurance jobs. Based on the job descriptions, have students identify the various types of jobs found in the area of insurance.
2. Based on job descriptions, have students choose job titles which are of particular interest to them. Examples: underwriter trainee, rater, typist.
3. Based on job titles selected, have students list questions to be answered by film and/or guest speaker.
4. Have students construct list of questions for their understanding of what insurance offers as an employee - working conditions, etc., and as a career - variety of jobs, etc.

Summary

Prior to selecting a job in the field of insurance, a student should obtain the answers to the following question: What does insurance offer as an employee and as a career?

Summarize the lesson's activities and intent.

ACTIVITIES FOR SESSION TWO:

Introduction:
1. Discuss aim of lesson - What does insurance offer as a career?
2. Prior to the film show class two model cars crashing into one another. Ask:
    a. Who pays for damage to the cars? (car owners, insurance company, etc., insurance company, adjuster, repair shop).
    b. Who determines the cost of damages? (Adjuster)

Tasks
1. Show students the film, "Careers in Insurance." (See attached description of film.) Have students make notations where applicable as regards listed questions.
2. Based on the film, have students produce additional pertinent questions. (Topics not covered as completely as individual student would like.)
3. If the film is not available, have students, using school resource center, research insurance materials to develop tasks.

Summary
Have students arrange notes (both mental and written) for further questioning of speaker (tomorrow) with respect to the basic objectives.

RESOURCES:

Film - "Careers in Insurance".
The film on careers in insurance should cover the following areas:
1. General description of the variety of entry level jobs available:
    a. Underwriter trainee
    b. Rating clerk
    c. Accounting department trainee
    d. Typist
    e. File clerk
2. General description of working conditions such as:
    a. Hours
    b. Fringe benefits
    c. Wage policy
3. General description of career opportunities:
    a. Promotional policy
    b. Career opportunities for women
    c. Job relocation policies

ACTIVITIES FOR SESSION THREE:

Introduction:
1. Discuss aim of lesson with students--what does insurance offer as a career?
2. Provide students with a case study: The need for life insurance.

Example: A twenty-eight year old man with wife and two children. Mortgage on house. Wants to send two children to college. Wants to retire at age 65. Is there a need for insurance? Why?

Tasks

1. Have students listen to speaker. The speaker in the insurance area will cover the following topics:
    a. Variety of jobs
    b. Working conditions
    c. Career opportunities

    Students should make both mental and written notes as regards their listed questions. After the speaker has concluded his formal talk students will ask the listed questions.
2. Have students submit unanswered questions to speaker for possible written answers at a later date.

Summary

Based on both film and guest speaker, have students arrange notes (mental and written) and listed questions as regards basic objectives of what insurance offers as an employee and as a career.

ACTIVITIES FOR SESSION FOUR:

Introduction:

Role-playing the following situation: Two or three skits involving students depicting various insurance jobs covered by film, speaker, and questioning. Have students stress job duties, career opportunities, hours, fringe benefits. The role-playing should stress good as well as bad aspects of these topics.

Tasks

1. Based on film and speaker, have students express their throughts on the following:
    a. Working conditions, wages, hours, etc.
    b. Opportunities for skilled and unskilled
        Sample: 1. Jobs are/are not interesting
        2. Career opportunities are/are not limited.
2. Based on film and speaker, have students express their thoughts on the following: (Insurance as a career)
    a. Great variety of jobs
    b. Attractive to those who like people
    c. Job security
    d. Careers for both men and women

"Career Opportunities in Insurance"

Summary

Reinforce student's thinking as to:
1. What does insurance offer you as an employee?
2. What does insurance offer as a career?

RESOURCES:

1. World of Work: Kimbrell-Vineyard
2. Film - "Careers in Insurance" - Audio-visual Department
3. Speaker - local insurance company
4. Model house
5. Model cars
6. Job descriptions - Insurance

EVALUATION:

Students will complete the following questionnaire:
1. List type of jobs available in the insurance field
2. Explain advancement probabilities
    a. by sex
    b. by age
3. Describe working conditions
    a. Hours
    b. Fringe benefits
    c. Equipment

World of Work - Grades 10-12
"Career Opportunities in Banking"
Armand Valentinetti

CAREER EDUCATION CONCEPT:

To identify the entry level career opportunities in the field of banking within the New York City area.

THEMES AND OBJECTIVES:

Themes	Objectives
Career Awareness	1. The student will identify various entry level jobs in the field of banking.
Educational Awareness	2. The student will identify information that will help in possible selection of specific jobs in banking field.

ACTIVITIES FOR SESSION ONE:

Introduction:

1. Discuss aim of lesson - What are the entry level job opportunities in banking? Also indicate this is the pre-visit lesson.
2. Elicit the extent of students' experiences and familiarity with banking.
    a. Using overhead projector show class a savings bank passbook.
    b. Students will receive samples of checks, deposit and withdrawal slips.

    Ask these questions:
    a. What services do banks offer?
        1. Savings, checking, mortgages, etc.
    b. Who provides these services?
        1. Tellers, bookkeepers, typists, collection clerks.

Tasks

1. Show students newspaper "want ads" for banking jobs (use overhead projector).
2. Have students analyze the advertisements as follows:
    a. List the various job titles
    b. List various skill and/or educational requirements stated in the advertisements.
3. Have students select job titles they are interested in at this time.

4. Have students research these specific job titles using school library resource center. (This will be lesson for tomorrow.)

Summary

Review with students (using "want ads") the following:

1. Identification of various entry level job titles;
2. Identify skill and/or educational information required for these jobs.

ACTIVITIES FOR SESSION TWO:

Introduction:

1. Discuss with students that this session will be spent in the School Library Resource Center.
2. Discuss how the School Library Resource Center can assist in identifying entry level jobs in banking.
3. Display posters and pictures of various banking activities in the resource area to be used by students. Have librarian make available career information publications, tapes, slides, etc. on banking.

Tasks

1. Have students research specific job titles selected during yesterday's lesson.
    a. What are job duties and responsibilities?
    b. What are skills and/or educational requirements?
2. Have students develop questions which have not been answered in whole or in part by the first day's lesson and their resource center research lesson.
    a. Specific job
    b. Duties and responsibilities of specific job
    c. Skill and/or educational requirements of specific job
    d. Jobs not mentioned that might be more to the interest and/or background of a student.
3. Have students list these questions on paper and bring them on field trip visit to bank.

Summary

Ask the question: How can a school library research center assist in the task of researching a job and/or area of business-industry?

Response:

1. Identify job titles
2. Describe job duties and responsibilities
3. Describe skills and/or educational requirements
4. Long range forecasts for specific job and business or industry.

ACTIVITIES FOR SESSION THREE:

Introduction:

1. This is the visit to the bank. Discuss aim of lesson--How can a visit to a bank assist in identifying and providing information on entry level jobs in the banking field?

   Ask students to describe their neighborhood banks.
   a. Building: facilities
   b. Activities going on in bank
   c. Types of personnel: teller, guard, typist, etc.

Tasks

1. Have students elicit responses to their questions from appropriate company personnel.
2. Have students observe "hands on" operations of various jobs.
   a. Teller
   b. Typist
   c. Clerks
3. Have students make written and mental notes of responses to their questions, "hands on" job observations, working conditions, etc.
4. Have students obtain during visit, the literature, contacts, additional material sources, etc., available for use in further research of career opportunities in banking.

Summary

Elicit from students, what assistance did a bank provide?

1. Direct response to their questions from people on the job and/or in authority.
2. Industry clarification and identification of entry level jobs and skill/education requirements.
3. Actual "hands on" job observation and/or experience.

ACTIVITIES FOR SESSION FOUR:

Introduction:

1. Discuss aim of lesson - What are the entry level job opportunities in New York City in the area of banking?
2. Elicit responses from students based on their past three days research and field trip experiences.
   a. Job titles
   b. Job duties and responsibilities
   c. Skill and/or education requirements

Tasks

1. Have students describe experiences acquired during field trip.
   a. Company people interviewed - types of jobs.
   b. Observation of actual jobs being performed - teller, typist, etc., on the job observation.

   c. Customer/employer interaction.
   d. Atmosphere of typical day in banking.
2. Have students exchange reactions to field trip.
   a. Visit did/did not assist in identification of entry level jobs.
   b. Visit did/did not assist in supplementing information (skills and/or education requirements) to help in selecting possible jobs in banking.
3. Have students identify and list job titles they were involved with during visit.
   a. Teller
   b. Typist
4. Have students develop and list a job description for each title.
   a. Duties and responsibilities
   b. Skills and/or educational requirements
   c. Salary range
   d. Promotional opportunities

Summary:

1. Elicit from students some entry level job titles in the banking field and list on the blackboard.
   a. Typist
   b. Teller
2. Discuss skills and/or educational requirements for the listed job titles. Include job duties and responsibilities.

RESOURCES:

Overhead projector; savings bank passbook; samples of checks, deposit and withdrawal slips; school library resource center; literature supplied by bank.

EVALUATION:

Each student will select two job titles (banking) of interest to themselves and write a job description for each. Job descriptions to include following:

1. job titles
2. duties and responsibilities
3. skills and/or educational requirements
4. salary range - salary steps, raises, etc.
5. job advancement steps

(These job descriptions will be compiled into a book for use by entire class.)

World of Work Course - Grades 10-12
"Exploring Office Worker's World"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To understand that occupational success requires certain abilities, skills and attitudes.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competancy	Given the occupations of a file clerk and typist, the student will identify the skills required for success in each occupation.

ACTIVITIES:

Introduction:
1. Develop and administer a pretest of the tasks performed by a file clerk and typist.
2. Administer the pretest and score it with the group.
3. Following the pretest scoring involve the students in a discussion of the following points:
   a. educational background required
   b. necessary skills
   c. personality traits necessary

Tasks
1. Ask the students to describe the work of someone they know who works in an office. (Example: typist; needs to type a minimum amount of words per minute, answers the telephone, keeps appointments recorded, does proof reading, should be organized, make good use of time.)
2. List student answers and elicit tasks performed by each from class members.
3. Continue discussion of duties and responsibilities of typist.
   a. type--minimum skill required for private industry
   b. filing--what skill is involved?
   c. answer phone

   Ask the questions:
   a. What are skills needed?
   b. What personality traits involved?
   c. Why is typing skill called the door opener to all careers?

Summary
1. Reinforce concept of universal need and opportunity for personal growth by illustrations and/or visit to school by recent graduate

engaged in typing job (kids relate better to peer models than to adult). Include in discussion the following:
   a. Personality traits vital to success.
   b. Desires and interests of typists.

2. Compose list of 5 questions you would ask a prospective employer.
   a. Salary?
   b. Mobility?
   c. Age of co-workers?
   d. Responsibilities?
   e. Will I be supervised?
   f. Will I be rated?

RESOURCES:

1. Occupational Outlook Handbook
2. Local newspapers
3. World of Work Kimbrell-Vineyard
4. Dictionary of Occupational Titles
5. Student who graduated recently and now has a job as a typist.

EVALUATION:

Fill in the following chart for a typist and then for a file clerk.

Typist

Skill	Duties	Personal

File Clerk

Skill	Duties	Personal

World of Work Course - Senior High
"Entry Job--Cleaning Industry"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To describe the skills necessary for clerical jobs in the cleaning industry.

THEMES AND OBJECTIVES:

Themes	Objectives
Skill Competency	The student will identify tasks done by clerks in dry cleaning store.
Employability Skills	Given the dry cleaning industry, the student will name traits needed for success.
Career Awareness	The student will list possible opportunities for advancement in the dry cleaning industry.

ACTIVITIES:

Introduction
(This lesson follows the class in which a job recruiter for the dry-cleaning industry has spoken.)
Let's discuss some of the important points our speaker made yesterday.
Why was the speech important to you?
1) Good example of entry level job
2) Stepping stone to learning more complex jobs in cleaning industry
3) Good source of summer job
4) Hours flexible - part-time work during school year.

Tasks
1. Set up work situation:
   One student behind counter, another brings article of clothing in to be cleaned. Have class list tasks typical to clerk.
   a) Examine article
   b) Advise customer of possible shrinkage (make it a point to relate importance of knowledge of textiles - school discipline)
   c) Notes defects
   d) Writes out word order slip (legible handwriting)
   e) Pins identifying tags on garments
   f) May add up bill (math)
   g) Use of cash register (business machines)

2. Role playing should lead to a discussion of perfecting skills learned in high school to insure job success.
   a) Speak clearly - explain problems to customer
   b) Make arithmetic computations quickly and accurately
   c) Ability to deal with people
   d) Ability to trace article if receipt is lost
   e) Ability to perform physical activity (stoop, kneel, bend, carry) without tiring
3. What are some opportunities for advancement if you do a good job?
   a) Dry Cleaner (your own business)
   b) Spotter
   c) Manager Branch Store
   d) Plant Foreman
   e) Maybe buy dry cleaning store. This conclusion can be used as a medial summary after class discussion on path followed by a garment from the receiving clerk through the plant back to the customer.

Summary
None provided.

RESOURCES:

Job Briefs - New York Department of Labor
Field trip to J.C. Penney in New York City
Guest Lecturer - "Nature of Clerical Work in Dry Cleaning Industry"
Rand Stores

EVALUATION:

1. Which of the following tasks are usually done by the clerk at the dry cleaning store? Check those which are done.
   ____complete order slip
   ____examine article
   ____treat stubborn spots
   ____collect money
   ____clean clothes brought in
   ____explain dry cleaning problem to customer
   ____make change
2. List two, traits needed for success in the dry cleaning industry.
   a)____
   b)____
3. List three jobs available in the dry cleaning industry.
   a)____
   b)____
   c)____

World of Work Course - Senior High
"Sources of Employment"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To understand how to be resourceful in obtaining a part-time job. To make effective decisions when more than one job opportunity is available.

THEMES AND OBJECTIVES:

Themes	Objectives
Self Awareness	The student will list three reasons for obtaining a part-time job other than economic benefits.
Decision Making Skills and Employability Skills	The student will describe a method for searching for a job.
Attitude and Appreciations	The student will describe the benefits of a systematic search as opposed to a "hit-or-miss" method.

ACTIVITIES FOR SESSION ONE:

Introduction

1. Discuss aim of lesson--How to devote your full ability and attention to getting part-time employment.
2. Ask students: How many of you have part-time jobs? (Pause for show of hands) How many of you expect to get part-time work before you finish high school?

Tasks

1. Ask students to identify some of the benefits a part-time job gives other than the obvious chance to make extra money. List responses on the board. Desired responses include:
   a) Help develop attitudes needed for success in work.
   b) Use part-time job to "test-out" field you think you're interested in.
   c) Make-good on part-time job, get valuable recommendation from employer for full-time job.
   d) Transition from school to work easier.
2. Have students read want-ads for highly technical job from current N.Y. Times. Ask the question: Who in the class qualifies for that job? Obviously none do. Follow this with an "Inventory List of Qualifications:" (for the students)
   a) Ability
   b) Interest
   c) Personality

   All are factors suitable for part-time job.

3. You know why you need the job
   what you can do, we are now ready for
   where to look and
   how.

   Have students list where they can look for jobs.

   Where
   - a) Newspaper (in conjunction with English teacher's lesson on reading a want-ad)
   - b) Employment agencies.
   - c) Family, friends.
   - d) School employment service.
   - e) Business firms near school (co-ordinate English curriculum on proper oral speech as a job prerequisite.
   - f) Community agencies (in conjunction with social studies curriculum on government agencies as resources for employment)
4. To identify how , have students complete the following task:
   - a) Prepare a 3 x 5 index card for each job lead you will follow.
   - b) On back of card, lower left hand side, record source of job lead.
   - c) Center of card--name of person you are to see. Name and address of company and phone + extension.
   - d) Upper right hand side record date and time of appointment (after appointment is made)

Sample card

Appt. 2/14
3:00 P.M.

Noah Daniel
(Personnel Manager)
Daniel and Sons
110 5th Avenue 376-1000

Times (Sun. 2/10/73)

Summary

Review the why, what, where and the how to find jobs with the students. Indicate the next session will deal with choosing among alternatives.

ACTIVITIES FOR SESSION TWO:

Introduction
1. Review with students the why, what, where and how to find a job.
2. Discuss intent of the lesson--How to choose the job rather than have the job choose you.

"Sources of Employment"

Tasks

1. Discuss with students that after they have completed a satisfactory number of interviews, they can now record their impression of each position and, more important, their initial evaluation of each company.
2. On the front of 3 x 5 index card, they can write a profile of the company. Suggestions for writing a profile of the company could include the following: (Choose only those that are important to you)
   a) What company makes.
   b) Where product or service is sold.
   c) Age of company.
   d) Impression of physical plant - surroundings.
   e) Hours - salary - advancement.
   f) Who else works there - age, sex, educational level.
   g) Attitude of supervisors.
   h) What satisfactions you can realize from job.
   i) Transportation.
   j) Does it suit your abilities?

Summary

Have students discuss advantage of the systematic approach used in finding and choosing a job over the "hit-or-miss" method.

RESOURCES:

Succeeding in the World of Work - Kimbrell-Vineyard
Open Doors: School-Business Partnerships. Public Ed. Assoc. 20 W. 40th St.
Want-Ad Section, New York Times.

EVALUATION:

1. List three reasons for obtaining a part-time job which is related to your career interests.
2. Describe a method for searching for a job and explain the advante over "hit-or-miss" method.

World of Work Course - Senior High
"Using Want Ads as a Job Resource"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To understand how to use want ads as a means of finding job sources.

THEME AND OBJECTIVE:

Theme	Objective
Employability Skills	Given statements about criteria of good want-ads, the student will discriminate those which are true or false.

ACTIVITIES:

Introduction

Review with student the aim of the lesson--exploring one of the sources you can use in getting a part-time job, namely Classified Ads. Provide motivation by showing the following ad:

Need A Job?
HELP Wanted
Call: BA 2-3456

1. What do you think of ad?
   a) Mysterious
   b) May be good job
   c) Good intriguing ad
   d) Too vague
2. What do you think job is?

Tasks

1. What should every ad have?
   Specific facts:
   a) requirements or employee qualifications
   b) who is advertising
   c) where is work done
   d) what is the salary
2. What ad should you avoid? Elicit:
   a) Ad that requires deposit of money
   b) Ad that requires you take a course for which there is a fee.
3. What are some of the special meanings to be aware of when reading an ad?
4. Print typical ad and have class analyze:
   "Distributing Executive - position available, nationally known sales company. Training for right man. Earnings while learning up to $800 per month."

"Using Want Ads as a Job Resource"

When reading this ad what questions should we ask?
a) What are the qualifications for the "right man?"
b) What kind of position is distributive executive?"
c) What does "earnings" mean? (It's not the same as salary.)
d) What does "up to" mean? (Could mean from $000 - $700 per month.)

Summary

A good ad will:
1. Specify exactly the nature of work.
2. Won't ask you to take a course or spend money.
3. Tell you just what salary is being offered.
4. Avoid ads that say:
   a) "Public Contact"
   b) "Public Relations"
   c) "Sales Promotion"
   d) "Outside order taking"
   e) "Supervisory position"
   They usually mean:
   a) door-to-door selling
   b) telephone selling
   c) direct selling
   d) door-to-door selling
   e) when no qualifications are listed it means getting friends to sell a product.
5. If you're working now and want a better job, answering a "blind" or vague ad can sometimes bring you face-to-face with your own boss.
6. Have students clip out two want ads, and write an evaluation of each.

Now that you know what to look for and what to avoid you can with the English teacher's help write effective resumes and letters of application for your job choices.

RESOURCES:

Want-ad section of Times, World of Work - Kimbrell & Vineyard

EVALUATION:

True-False test:
1. The more concrete and specific facts an ad mentions, the more it usually offers.
2. The less concrete facts mentioned the more the job offers.
3. The benefits listed in an ad are the crucial factors.
4. Qualifications for the job are the same as requirements.
5. Salary means the same as earnings.
6. "Public Contact" or "Public Relations" usually means soliciting by phone.
7. In hard to sell jobs there will be more "Printed nothingness" than factual information.
8. "Send resume" or "Write to box" means employer is not pre-screening applications for job.
9. If your resume is strong in all areas you will always be hired.
10. If you are now employed and searching for a new job you should forget blind or vague ads.

World of Work Course - Senior High
"Researching Job Choices"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To demonstrate the ability to research job choices in line with personal characteristics.

THEMES AND OBJECTIVES:

Themes	Objectives
Decision Making Skills and Career Awareness	The student will describe several factors to examine when researching a job choice.
Self Awareness	The student will identify a job choice which is in harmony with the student's personal characteristics.

ACTIVITIES:

Introduction
1. Discuss aim of lesson--factors to consider when making career choices.
2. Review concept "realistic career goal"--based on basic research into idealistic career choices.

Tasks

With the students, discuss the various factors a person should know when they look at a job.

Question: What must you know about every job to decide whether your education, abilities and skills fit in with your career goals?

1. Nature of work--a description of the job
2. Typical tasks should include activities which are:
    a) Mental
        1) Works with numbers
        2) Writes orders
        3) Reads and interprets information
        4) Clerical
    b) Physical
        1) wraps packages
        2) lifts cartons
        3) stocks shelves
        4) unpacks merchandise
        5) stands
        6) walks
    c) Creative
        1) helps customer select merchandise
        2) creates display
        3) uses good sense as to color, proportion, descriptive language.

3. Working Conditions
   - a) Factory - poor ventilation
   - b) Office - large crowd of people
   - c) Warehouse
   - d) Indoors
   - e) Outdoors
4. Where employed
   - a) Department store
   - b) Specialty shop
   - c) Factory
5. Traits needed for job success: Give an example of a job where each is important.
   - a) Good handwriting
   - b) Good speaking voice
   - c) Excellent memory
   - d) Being physically attractive
   - e) Dressing well
   - f) Doing detailed work for long periods of time
   - g) Being careful (working in dangerous situations ; working with money)
   - h) Ability to do hard physical work without tiring
   - i) Working with people, things, ideas
   - j) Doing repetitious work without being bored
6. What advancement opportunities are there?
7. What jobs are there in our area? Give specific jobs.

Summary

As a homework assignment, have students choose a job they think they would like as a career choice and explore it using the techniques developed in class. Based on information they researched, have students apply information to their personal desires, interests, abilities, and skills. Write a paragraph on why they will continue to pursue this goal or decide it is an "unrealistic career goal" for themselves.

RESOURCES:

Kimbrell-Vineyard text - World of Work , Job Briefs , N.Y. Dept. of Labor

EVALUATION:

1. Describe several factors you should consider when making career choices.
2. Identify a job and describe how this job is in harmony with your personal characteristics.

World of Work Course - Senior High
"How to Get a Job (Job Sources)"
Armand Valentinetti

CAREER EDUCATION CONCEPT:

To demonstrate the ability to identify job sources.

THEMES AND OBJECTIVES:

Themes	Objectives
Employability Skills	The student will demonstrate the ability to identify job sources, both part-time and career, given a simulated or real job-seeking task.
Decision Making	The student will demonstrate observation skills used to collect data needed to solve problems--identifying job sources, both part-time and career.

7

ACTIVITIES FOR SESSION ONE:

Introduction

1. Ask the question: How do we locate job openings? (Job sources)
2. Indicate to students the intent of the lesson.
   a) To develop data on different sources of jobs.
   b) To encourage students to think about and develop abilities in identifying job sources.
3. Place statement on blackboard - "Getting a Job is a Job in Itself". Elicit from students meaning of above statement with respect to part-time employment while in school. (Utilize students' experiences).

Tasks

1. Have students "brainstorm" among themselves for 15 minutes as to part-time job sources.
2. Elicit (using question and answer) from students the following part-time job sources:
   a) Teacher, counselor, and placement director
   b) Friends and relatives
   c) Letters of application
   d) Locate and visit local business establishments
3. Ask the question: How can school help you as a job source?

Summary

Have students summarize part-time job sources stated above. State that the next lesson will deal with career job sources.

"How to Get a Job (Job Sources)"

ACTIVITIES FOR SESSION TWO:

Introduction - Aim

1. Ask - How do we locate job openings? (Job sources)
2. Discuss with students the importance of developing data on career (long range) job sources.
3. Role playing with two students. They are to play the roles of graduating seniors who are to react to the following statement: "Getting a job is a job in itself." (Role playing to be improvisational.)

Tasks

1. Have all students "brainstorm" among themselves for 15 minutes as to job sources relating to graduating seniors.
2. Provide each row of students with a different case study which deals with a specific job source for seniors.
3. Elicit from students the following job sources: (using data from case studies)
    a) Newspapers
    b) Employment Agencies
    c) Personal Application
    d) Suggestions from friends and relatives
    e) Letters of application
    f) Contacts with former employers
    g) Government personnel offices
    h) Union hiring halls

Summary

Students will capsulate career job sources stated above.

RESOURCES:

World of Work - Kinbrell-Vineyard
Newspapers (Classified Section)
Letters of application (samples)
Yellow pages (Telephone)

EVALUATION:

Have students list both part-time and career job sources.

World of Work Course - Senior High
"The Job Interview"
Armand Valentinetti

CAREER EDUCATION CONCEPT:

To demonstrate proper interviewing skills.

THEME AND OBJECTIVE:

Theme	Objective
Employability Skills	The student will demonstrate during a simulated job interview the following skills: a) Proper appearance, speech and attitude b) Knowledge of prospective employer c) Ability to overcome objection

ACTIVITIES:

Introduction

1. Discuss the purpose of the lesson--how to behave in a job interview. Include in the discussion how a job interview affords the opportunity to "sell" oneself to company.
2. Show students a film on job interviews - both good and bad. Elicit remarks from students as to film. Include ideas of
   1) Proper appearance
   2) Good vocabulary
   3) Confidence

Tasks

1. Have students, through role playing, conduct a job interview with students acting both interviewer and interviewee.
2. After each role playing interview, have students analyze same with instructor as moderator.
3. Through the use of role playing, have students:
   a) Experience actual job interview
   b) Demonstrate
      1) Proper appearance, speech and attitude
      2) Knowledge of prospective employer
      3) Ability to overcome objections

Summary

Have students review the criteria for a successful job interview.

"The Job Interview"

RESOURCES:

1. Succeeding in the World of Work - Kimbrell-Vineyard
2. Film - "Job Interview" Audio-Visual Dept. EHHS
3. Salesmanship Fundamentals - Ernst & DeVall

EVALUATION:

If possible evaluate students interview skills through demonstration. If this is impossible have students, in writing, evaluate a case study to demonstrate their ability to distinguish the following criteria of a successful job interview:

1) Proper appearance, speech and attitude.
2) Knowledge of prospective employer.
3) Ability to overcome objections.
4) A sound overall job interview.

World of Work Course - Senior High
"Personal Effectiveness on the Job"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To demonstrate the skills necessary to adjust to those first weeks on the job.

THEMES AND OBJECTIVES:

Themes	Objectives
Employability Skills	Given a particular work situation with conflict, the student will describe how to adjust to that work situation.
Attitude and Appreciations	The student will list five positive attitudes needed to work in a large group setting.
Employability Skills	Given a set of statements on work habits, the student will identify those which are true or false for probable success.

ACTIVITIES:

Introduction
Those first few days on the job probably set the stage for future success on the job. There are several attitudes and skills which will help insure that individuals will have success.

Tasks
1. Have students role play a situation in which one friend is telling another about his experiences on his first week on the job. Prepare each student for his role. Ask other students whether in the role playing situation or not to look for problems encountered, employer-employee relationships, improper attitudes, etc.

   Build the role playing situation around the following idea: (to be used with English teacher on conversation role playing, 1. tone 2. attitude)

   "Hi Ginney, this is Jane." "That job I go is terrible, the head of my department is an idiot, she gives me this boring, simple job that she explains 50 times. After I finished, I made one short phone call to Joe and when I saw her frown, I went up to the front office to tell them that the work she gives me is too simple and then she looks for silly things to find fault with."

(Note to instructor: This activity may be used in conjunction with the English teacher on conversational communication skills.)

2. Ask students to respond to questions about the conversation such as:
   a) Is Jane's supervisor as unhappy about Jane's employment as she is?
   b) What attitudes should Jane adopt to make her employment pleasant for her and more profitable for her employer?
3. Have students decide upon some attitudes necessary for job success. These may include some of the following:
   a) Never make disparaging remarks about employer.
   b) You are paid to do a job, not take care of your personal business.
   c) People avoid chronic complainers.
   d) Bright people usually don't let others know they feel superior to the job.
   e) Do the job you're given so well that your superiority will be obvious to your co-workers.
   f) Cool it! Don't be pushy! Aggressive!
   g) Your first days may go slowly but don't be a clock-watcher.
   h) Never, ever, go over your supervisor's head.
   i) Abide by the rules and regualtions of the company you work for.
   j) Learn to do your job before you offer suggestions for improving it.
4. Now provide students with the opportunity to practice the rules developed in Task 3. Set up a role playing activity such as the following:

   You have been working for ABC Co. for a year. A new girl comes into the office.

   Ask students to identify the qualities admired in this new worker. Sample answers may include:
   a) She smiles and is agreeable.
   b) She knew my name the next day.
   c) She comes back in time from coffee break.
   d) She was tactful when I asked her for her opinion of the "office pest".
   e) She didn't interrupt me constantly with questions.
   f) She's pleasant company.
   g) She doesn't show-off.
   h) She was nice enough to chip-in for a gift for Bill even though she's only here one week.

Summary
1. Provide a series of problem situations to which an individual might need to adjust. Have students decide upon ways a person should resolve these conflicting situations.
2. Have each individual identify areas he would personally have to be careful about in a first-week setting.
3. Review first week attitude with students.

RESOURCES: Supplementary

Occupational Essentials - H.C. Johnson Press

"Personal Effectiveness on the Job"

EVALUATION:

1. Give student a conflict situation and ask student to write a paragraph on how he would adjust to that situation.

   "You have just been told that you were doing something wrong by your supervisor. He walked out and the individual next to you says, "He always is like this, he never understands, or says 'thank you'. I get so mad at him sometimes."
2. You are in an operation in which you must work in a large group setting. List three attitudes which if carried out by you, should help you function properly in that setting.
3. Set up a true and false test item.

   a)_____The most important factor in job success is attitude.
   b)_____The person with a negative attitude smiles easily.
   c)_____The person liked on a job respects the opinions of others.
   d)_____If you've finished your job, it is nice to help others.
   e)_____After being directed on how to do a job, use your own way, it is better.
   f)_____The person who is enthusiastic is usually a good worker.
   g)_____If you cannot be loyal to your employer, it is best to look for another job.
   h)_____Avoid people in the company who criticize your work.
   i)_____No one can be truly successful on the job by himself.
   j)_____If you're not sure on how friendly to be on your first job, be overfriendly.

World of Work Course - Senior High
"Getting Along on the Job"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To demonstrate the ability to get along with others on the job.

THEME AND OBJECTIVE:

Theme	Objective
Employability Skills	Given a hypothetical work situation, the learner will list behavior necessary to alleviate the problem.

ACTIVITIES:

Introduction

1. The introduction should include a review of the previous lesson that instructed the student on the importance of proper attitudes. Discuss the following:
   "Aren't you glad you use Smiles?" Don't you wish everyone did?"
2. Place the following terms on the board:
   a) tact
   b) honesty
   c) loyalty
   d) enthusiasm
   e) courtesy
   f) industry
   We agree that these traits are admirable and that they combine to form the positive personality.

Tasks

1. It's easy to be loyal or enthusiastic in a work situation that has the climate to insure loyalty or enthusiasm. Ask the following questions:
   a) When aren't you enthusiastic?
   b) How is your loyalty tested?
   c) What are some of the pressures that assail an employer?
      1.
      2.
      3.
3. When a person has been abrupt or impatient with you, your reaction should be:
   Elicit: He's human; he has problems; he is not criticizing me personally.
   Rx: Double dose courtesy and loyalty and tact and industry (do your job)
4. Ambition stimulates you to get along with your superiors. Who else must you consider to insure a "Smile" climate on the job?

5. Explore the difference between school population and work population.
6. Explore chain of responsibility in both.
7. List characteristics fellow workers ☹ on.

8. Elicit through "role playing"--give 10 students ten sentences that would be said about new employee, i.e. "Who does that kid think he is coming in late every day?"
   - a) Not learning job (Then trying to improve on it)
   - b) Not doing things company way
   - c) Being discourteous
   - d) Taking care of outside interests on company time.
     - 1) use phone to make date
     - 2) doing school homework
   - e) Dishonesty
     - 1) Have you stolen company time by leaving early, coming back late from coffee break?
   - f) Not cooperating--whole list of ways:
     - 1) "I wasn't hired for this job."
     - 2) "Sorry, I didn't know what you meant."
     - 3) "No, I can't work weekends, I have to go skiing."
   - g) Being careless
   - h) Being a troublemaker, gossip, etc.
   - i) Bad-mouthing company
   - j) "Brown-nosing" superior

Summary

You won't make company workers ☹ if you avoid above. They won't resent your promotions or advancement. They'll go to bat for you when you need them. In fact, positive relationship may insure advancement. Workers who ☺, create pleasant "job climate." Employees who:
1) follow company rules
2) take pride in their work
3) accept responsibilities
4) don't waste company time or materials
5) work without disturbing others
6) strengthen team spirit

are giving the employer a labor force that uses 100% of its potential to help the company realize its profit goal.
Would I hire me if I were boss?
Why?

RESOURCES:

Text: World of Work - Kimbrell & Vineyard
Occupational Essentials - David Richter
Successfully Finding Yourself and Your Job - Magoun

EVALUATION:

Problem solving technique. Present 5 problems of employer-employee relationship; have students play "Dear Abby" to resolve problems.

World of Work Course - Senior High
"What Your Fellow Workers Expect Out of You"
Armand Valentinetti

CAREER EDUCATION CONCEPT:

To demonstrate the interpersonal skills necessary to get along on the job.

THEMES AND OBJECTIVES:

Themes	Objectives
Employability Skills	The student will describe the implications of working with and without supervision, independently and with others.
Employability Skills	The student will describe the responsibilities to himself and others when accepting a task or job.
Self Awareness	The student will describe individual differences and become tolerant in his interpersonal relationships.
Employability Skills	The student will list the rules that will help the new worker to get along with fellow workers.

ACTIVITIES:

Introduction

1. Describe the aim of the lesson- How to get along on the job.
2. Contrast the following two situations.
   a. The Beatles were one of the most successful musical groups in history. Why?
   b. The New York Knicks won a championship even though they placed only one or two players on the All Star Team? Why? (Make sure objectives of the lesson are brought into the discussion)

Tasks

Have the students complete the following:

Yes No Answer your opinion of yes or no to the following questions:

___ ___ 1. If the new worker does a poor job, is it likely that his fellow workers will suffer for it?

___ ___ 2. Is it seldom necessary for other workers in a company to give the new worker their support?

"What Your Fellow Workers Expect Out of You"

___ ___ 3. Does the new worker ever find that he/she must overcome a certain amount of resentment from more senior workers in the company?
___ ___ 4. Is it true that many people have an inherent opposition to change?
___ ___ 5. Will the new worker have a lot to learn about his/her new job no matter how much education he/she has had?
___ ___ 6. Can the new worker best advance in his/her new job by telling the company immediately how to improve its problem?
___ ___ 7. Should the new worker criticize publicly any fellow worker in the department of his company?
___ ___ 8. Is it a good idea for the new worker to belong to a clique in his/her company?
___ ___ 9. Should every job be attempted cheerfully, no matter how insignificent, in order to get ahead?
___ ___ 10. Should you "toot your own horn" about your job performance?
___ ___ 11. Will winning the respect and approval of fellow workers help enable the new worker develop into a leader?

After the students have recorded their opinion to the question, have the students form small groups to discuss opinions which they will bring to the group.

Summary:
Have each group report their opinions to the questionnaires. Have them come up with attitudes to help the new workers. These attitudes could include the following:

1. New worker has a lot to learn.
2. Don't try to reform the company.
3. Observe the rules of job etiquette.
4. Never criticize or embarass other departments.
5. Stay away from cliques.
6. Prove that you can take it.
7. Let your work speak for you.
8. Learn to be a leader.

RESOURCES World of Work-Kimbrell-Vineyard
Salemanship Fundamentals-Ernest & Davall

EVALUATION:

1. Have students individually complete following test:
List eight attitudes that will help the new worker to get along with fellow workers.
2. Describe the implications of working with or without supervision, independently and with others.
3. Describe in three sentences a reason for tolerating individual differences.
4. Describe the responsibilities to yourself and another when accepting a task.

World of Work Course - Senior High
"Establishing Good Work Habits"
Armand Valentinetti

CAREER EDUCATION CONCEPT:

To understand how habits and skills required in school are used in job situations.

THEMES AND OBJECTIVES:

Themes	Objectives
Educational Awareness	The student will identify skills, habits, and characteristics required in school that are relevant to selected occupations.
Educational Awareness	The student will describe how certain school activities relate to his use of time throughout life.
Employability skills	The student will describe the need for good work habits such as initiative, completion of task, completion time, neatness, accuracy, attendance, punctuality in the world of work.

ACTIVITIES:

Introduction
Discuss with the students that it is important to establish good work habits, attendance, punctuality to succeed in the world of work, and that skills in school prepare us for this.

Tasks
1. Set up blackboard with actual copy of rating form used by supervisors to rate work habits of new workers. Elicit from students how and why this form is used.
2. Give each student a rating form and ask them to rate themselves based on school work.
3. Give students a case study, and have them individually rate fictitious employees using rating form. Case study will describe fictitious employee as to both good and bad work habits, attendance, punctuality, neatness, etc.
4. The student and teacher, using the results of two ratings cited above, will discuss both ratings as to work habits, attendance, punctuality, etc.

Summary:
Success in the world of work depends on: a. good work habits b. attendance, c. punctuality.

"Establishing Good Work Habits"

RESOURCES:

1. Succeeding in the World of Work, Kimbrell and Vineyard
2. Rating form used by executives in rating work habits of new workers
3. Film "Succeeding on the Job," Audio-Visual, E.H.H.S.

EVALUATION:

1. Students will list skills, habits, and characteristics acquired in school that are relevent to the following jobs:
   a. typists
   b. stock
   c. mail room

2. Students will describe how certain school activities relate to his use of time in following areas:
   a. work
   b. leisure-social
   c. retirement

3. Students will write essay describing the need for good work habits.

World of Work Course - Senior High
"An Adult Responsibility: Managing Money"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To learn how to manage money.

THEMES AND OBJECTIVES:

Themes	Objectives
Economic Awareness	The student will describe the advantages of managing his salary.
Economic Awareness	The student will solve budgeting problems given a case-study.
Economic Awareness	The student will prepare a budget to exhibit how he manages his income.

ACTIVITIES:

Introduction

Have you noticed two people who earn about the same amount of money each week, but, one seems to show more for his earnings? Elicit discussion that makes following points from personal experience:

1. Concept of "living within your means"
2. New worker financial responsibility to his family, community, self.

Tasks:

1. Use case history method to show the different degrees of responsibility manifested by students working for the first time. After each case study have the students evaluate:
   a. wise,
   b. foolish spending of salary, and
   c. solve problems in money management posed by each case.
2. The problem solving technique should develop the following concepts.
   a. Money management requires planning
   b. The first step in planning a budget is to plan expenses
   c. Budget planning will help you establish goals in using money
   d. Budgets should be flexible so that they can be adjusted.
   e. Budgets should provide the following information:
      A. Sources of income
      B. Major expenses
         1. Can be broken down for a pay period (day, week or month)
         2. What expenses are fixed: taxes, rent, utilities, insurance, school tuition

3. What expenses are flexible: clothing, records, furniture for room, contributions, medical, dental care, recreation

3. Trial form to live within your income:

Income
  less fixed expenses
Balance
  less flexible expenses
Balance
  less bills due and daily living expenses
Saving for Goals

Summary:

Summarize lesson through the following questions:

1. What is a budget?
2. List 5 reasons for planning a budget.
3. What 2 basic steps are involved in planning a budget.
4. What must you decide to estimate expenses?
5. How do you decide the amount to be saved for future goals?
6. What 4 groups of expenses should be included in every budget?
7. How can you insure yourself to following a budget?

RESOURCES:

Federal Government Pamphlet: "Budgeting Your Money"
World of Work, Kimbrell and Vineyard

EVALUATION:

1. Describe in a paragraph the advantage of managing your money.
2. Give students a case study and have them solve the budgeting problem.
3. Match Column A with Column B (Think in terms of planning a budget)

Column A
clothing
taxes
movies
new muffler
food
dentist
vitamin pills
laundry
tennis lessons
G. O. dues
savings for college
newspaper

Column B
Fixed expenses
Future flexible Expenses
Day to day living costs

4. Prepare a budget of your first week's salary.
5. Analyze your expenses and determine which are luxuries, which are necessities.

World of Work Course - Senior High
"Reading Your Paycheck-Social Security"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To understand how social security is deducted from the paycheck.

THEMES AND OBJECTIVES

Theme	Objectives
Economic Awareness	The student will list four basic social security benefits.
Economic Awareness	The student will describe why the benefits are available to you.

ACTIVITIES:

Introduction

Ask the following questions:

1. What is social security?
2. Can people who are self-employed get social security?
3. Who pays the cost of social security?
4. What determines the amount of payment?

Tasks

1. Discuss the four basic benefits of social security
    A. Old age
        65 man
        62 woman
        62 at reduced amount
        child under 18
    B. Survivor's benefit
    C. Disability
    D. Medicare - Health insurance at age 65 or over
2. Discuss with the students why benefits are available.
   Include in dicussion how everyone pays social security tax (even those receiving benefits.)
   Discuss how taxes are paid. (Put schedule of tax rates through 1977 on board.)
3. Discuss how benefits are determined.
    a. Retirement
        Range from $84.50 - $266.10 per month, depending on age and monthly earnings.
    b. Disability
        When
    c. Survivor benefit
4. Describe the purpose of Social Security card
    a. Where to get from
    b. Who gets card

"Reading Your Paycheck-Social Security"

Summary:

Have the students answer the following questions on social security.

1. The Social Security Act is a law of our ______________________
2. What are the names of the three basic types of benefits available through Social Security?

   ______________________ ______________________ ______________________
3. Who may receive Survivor's Benefits?
   - A.
   - B.
   - C.
   - D.
   - E.
   - F.
4. Who must have a Social Security Card? ______________________

   ____
5. To Whom are Old-Age Benefits paid?
   - A.
   - B.
   - C.
   - D.
   - E.
   - F.
   - G.
6. Does one need to have a job in order to get a Social Security Card?

   ____
7. Why is a Social Security Card necessary when you apply for a job?

   ____
8. Who may receive Disability Benefits?
   - A.
   - B.
   - C.
   - D.
   - E.
   - F.
9. The Social Security Card is issued to anyone upon request without charge by the

   ______________________ ______________________ ______________________
10. Write your Social Security Number.

    ______ ______ ______

RESOURCES:

Occupational outlook handbook

Kimbrell-Vineyard, Success in the World of Work

EVALUATION

1. Have the student list four basic social security benefits.
2. Describe why the benefits are available to you.

World of Work Course - Senior High
"How to Spend Your Money Wisely"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To be aware of fraud in buying goods and services.

THEMES AND OBJECTIVES

Themes	Objectives
Economic Awareness	The student will describe the most prevalent kinds of fraud practiced.
Economic Awareness	The student will list the organizations that protect the consumer and show the functions they perform.

ACTIVITIES:

Introduction

How many of you have been cheated recently? How?
What did you do about it?
Explore student experiences concerning fraud.

Tasks

1. Who can help you if you've been cheated?
List the following:
    - a. Federal agencies - U.S. Food and Drug
    - b. Administration and Federal Trade Commission
    - c. State Agencies - State Weight & Measure Agencies
    - d. Private Agencies - Better Business Bureau
    - e. Consumer Advocates - Ralph Nader
    - f. Consumer himself:
        1. Be continously informed
        2. Study product
        3. Study market
2. How can fraud endanger your life?
Answer evidence of fraud in food purchases.
3. What are some food frauds?
    - a. Adulteration (Bon Vivant soup)
    - b. Misrepresentation
    - c. Short measuring
    - d. Deceptive branding
    - e. Overpricing
4. Who is usually victimized by fraudulent practices?
Elicit:
    1. Poor
    2. Minorities
    3. Foreigners ' language difficulty.

5. What can government do?
   Elicit:
   Discussion on education of consumer.
6. What recent law has helped educate the food purchaser?
   Elicit:
   Unit Pricing

Summary

The following homework assigment should be given

1. Compare 3 sizes of Kellogs Corn Flakes.

   Large size wt. of contents_______ Price_______ Price per oz._______
   Medium size wt. of contents_______ Price_______ Price per oz._______
   Small size wt. of contents_______ Price_______ Price per oz._______
2. Answer also the following questions
   a. In which package is cost per oz. highest?
   b. What package would be best for family of 5?
   c. What package would be best for family of 2 adults?

ACTIVITIES FOR SESSION TWO:

Review homework:

Introduction:

Is it always wisest to buy the largest size? Have student "reason" that quantity depends on family size and eating habits.

Tasks

1. What other commodity frequently purchased by consumer lends itself to fraudulent practise?
   Elicit:
   Auto Repair
   a. Who is victimized?
   Elicit:
   Women
   People not knowledgeable in auto mechanics
   b. What form does fraud take?
   Elicit:
      1. Replace parts not defective
      2. Labor Cost padded
   c. What can be done to prevent fraud?
      1. Follow factory manual-preventative maintenance.
2. What has government done to protect the consumer from fraud?
   Federal Trade Commission Set-Up
   1. Control deceptive advertising
   2. Truth in labeling
   3. Truth in packaging (short weight)
   4. Truth in lending (regulates credit companies)
3. What private organizations protect the consumer from fraud.
   Better Business Bureau - financed by local businessman
   1. Prevents deception in advertising
   2. Acts on consumer complaints on deceptive ads
   3. Warns public against fraud

Consumer's Union
1. Reports on quality of various products.
Ralph Nader - private citizen
1. "Unsafe at Any Speed" - defects in cars.

Summary

Complete the following statements:
1. An intentional scheme to cheat a person is ________________.
2. A consumer can protect himself by buying ________________.
3. A federal agency that protects the consumer is ________________.
4. Most victims of auto repair fraud are ________________.
5. Victims of fraudulent practices in the food industry are ________________ ________________.
6. Filling a can of vegetables with too much water is ________________ ________________.
7. A private agency to protect the consumer is ________________.
8. "Truth in labeling" is controlled by the ________________.
9. A magazine that reports on the quality of products is ________________ ________________.
10. "Unsafe at any Speed" was written by ________________.

RESOURCES:

Kimbrell-Vineyard "World of Work"
Consumer's Report

EVALUATION
1. Describe the most prevalent kinds of fraud practiced.
2. List three organizations that protect the consumer and show the functions they perform.

World of Work Course - Grades 10-12
"Contracting for Goods and Services"
Muriel Daniel

CAREER EDUCATION CONCEPT:

To understand the laws that govern the relationship among people dealing with contracts.
To understand how individuals coming into the job market are protected by the law.
To describe the rights and responsibilities of young people and the commercial code.

THEMES AND OBJECTIVES:

Themes	Objectives
Employability skills	The student will describe the elements needed to enforce a contract.
Employability skills	The student will list the components of a legal contract.
Employability skills	The student will list the cases when it is best to get professional legal advice.
Employability skills	The student will match 20 legal terms with the legal definition.

ACTIVITIES FOR SESSION ONE:

Introduction
Ask students the following questions: What does the word "law" mean? Why do we need laws? What are two major classifications of law?
Insure that the following is brought out in the discussion:
1. Public law - regulates relationship between people and government
   a. Constitutional Law
   b. International Law
   c. Administrative Law
2. Private law - regulates relationships among people
   a. Contracts
   b. Real estate
   c. Personal injury
3. Civil law
   a. Crimes of violence
   b. Stealing

Tasks
1. Discuss how laws vary from state to state but laws dealing with sales contracts are uniform. Discuss the contract, a promise that can be legally enforced. What must a contract contain to be valid and enforceable by law?

"Contracting for Goods and Services"

2. The remainder of the period is to be used to pre-assess student knowledge in the area. It is a ten question, yes/no test. (For scoring purposes, the first five questions are "yes" and the remaining five are "no".)

___1. A contract is binding if it is signed without being read.
___2. A contract is binding if you sign it to get rid of a persistent salesman.
___3. A contract is binding if you misunderstand part of it.
___4. An installment sale is a contract.
___5. A contract to buy real estate must be in writing.
___6. A contract is binding if it involves breaking the law.
___7. A contract is binding if someone threatens you to sign it.
___8. Your fourteen year old brother can sign a contract to buy a bicycle.
___9. You must have a written contract to buy clothes.
___10. You must return or pay for merchandise sent to you that you did not order.

Summary
None provided

ACTIVITIES FOR SESSION TWO:

Introduction
Ask students what makes a contract legal. Explain that this is the purpose of the lesson.

Tasks
Build activities around the following content area - two of the five elements that must be present in every legal contract.

I. Mutual Assent
    a. offer and acceptance
    b. both parties agree on terms (meeting of minds)
    c. offer must be clear and definite
        Is an advertisement a legal offer? No. Why? May not want or be able to sell everyone. Advertisement may say "quantities limited."
    d. acceptance
        (1) direct communication
        (2) mail (contract made when offeror gets letter)
        When can an offer be terminated?
        (1) Offeror makes offer for stated length of time
        (2) Offeror makes offer at a given date
        (3) Terminates on death of offeror
        (4) Offer can be terminated at any time - rewards
        When can offer be terminated if no time is stated? Elicit: offer good for "reasonable period of time".

II. Competent Parties
    1. Person must understand his rights and obligations.
    2. Minors cannot make a contract.
        Who is a minor? Different states have different laws. Most states 21 is legal age. New York State - 21 years of age, man; 18 years of age, woman
    3. Can a legal contract between a minor and an adult be broken? Yes, but only minor has privilege to cancel contract.

4. If agreement between a minor and adult is a legal contract:
   (a) adult must carry out his part of the contract
   (b) minor can break contract
5. How can a contract be made between a minor and adult?
   (a) minor misrepresents age
   (b) minor looks older and adult does not require proof of age
6. When is a minor obligated to fulfill contract terms? When minor contracts to buy necessities.
   (1) food
   (2) clothing
   (3) shelter
   (4) medical attention
7. Can an adult collect payment from a minor for sale of luxury item? No. Yes, if parent countersigns purchase contract or charge account in department store is used.
8. What identification should a merchant demand as proof of age?
   (a) driver's license
   (b) draft card
   (c) identification card
9. Who else cannot make a contract?
   (a) people who are mentally deficient
   (b) insane
   (c) people who were intoxicated when contract was made

ACTIVITIES FOR SESSION THREE:

Introduction

Review previous two lessons to enforce continuity. What two elements are needed for a legal contract? When is an offer not clear? When can an offer be terminated? Why isn't an ad an offer? If a person accepting the offer mails his acceptance, when is the contract made? What is the legal age for making a contract in New York? What is a minor responsible for?

Tasks

Build activities around the remaining three of five elements that must be present in every legal contract.

III. Legal Purpose

1. Illegal terms make a contract unenforceable. Examples:
   (a) Contract to steal or accept stolen goods
   (b) Contract to bump someone off
   (c) Gambling (unless bets are made according to state law)
   (d) Usury - charging higher than maximum interest rate

IV. Consideration

One party agrees to do something and the other party agrees to do something of value in return.

1. Consideration may be money, services, goods, promises to refrain from doing something one has legal rights to do. Example: Not put up clothes line for lease

V. Legal Form

1. What contracts must be in writing?
   (a) Installment credit or purchase contract

(b) If you guarantee the debt of another person in case of default
(c) Contract to buy or sell real estate
(d) Agreement to sell personal property valued at over $500
(e) Contract that takes over a year to complete

2. What special form must a written contract follow? To be legal, every contract form must:
   (a) Show date, place of agreement
   (b) Have names and addresses of contracting parties
   (c) Statement of what contract is about
   (d) What consideration is: money, goods, or services given to bind contract
   (e) Signatures of parties or their agents
   (f) Sometimes signatures of witnesses

ACTIVITIES FOR SESSION FOUR:

Introduction
None provided

Tasks
1. Review questions:
   (a) When isn't a contract legal?
   (b) What is usury?
   (c) What can be given instead of money to bind a contract?
   (d) Name three kinds of contracts that must be in writing.
2. What suggestions would you make to a person entering into a contract?
   (a) If contract is complex it should be drawn up by an attorney.
   (b) Read carefully, make sure terms and amounts of money are listed accurately.
   (c) Get an attorney to help you decipher small print.
   (d) Always file an extra copy of the contract in a safe place.
   (e) Have both parties to contract sign if change is made.
3. When is contract void?
   (a) When made by force
   (b) When terms are fraudulent
   (c) When a proven mistake has been made.
4. Homework: Define the following:
   (a) voidable
   (b) usury
   (c) commercial code
   (d) mutual consent
   (e) termination of offer
   (f) competent
   (g) valid
   (h) consideration
   (i) reverse
   (j) hazardous

RESOURCES:

1. Sample copies of the following legal forms:
   a. A lease for a house
   b. Contract to buy or sell real estate
   c. A guarantee for service for automobile, household appliances
   d. A copy of a lawyer's opinion of a real estate purchase.
2. Text - Kimbrell and Vineyard, World of Work

"Contracting for Goods and Services"

EVALUATION - ACTIVITIES FOR SESSION FIVE:

The activity is the following full period test:

Test on Legal Contracts

I. True-False Quiz

___1. A contract is not binding if it is signed to get a salesman to leave your home.
___2. Legal advice is given in the form of an opinion.
___3. You must pay for merchandise sent to you without your request.
___4. In a contract, "consideration" means the buyer will consider signing the sales contract.
___5. Written contracts must be dated to be legal.
___6. Contracts for goods over $500 value need not be written to be enforceable.
___7. A contract made to sell a stolen bicycle can be enforced.
___8. The services of a lawyer are needed when buying real estate.
___9. A minor is not a competent party to a contract.
__10. A contract is void if it has not been properly communicated.

II. Match Column A

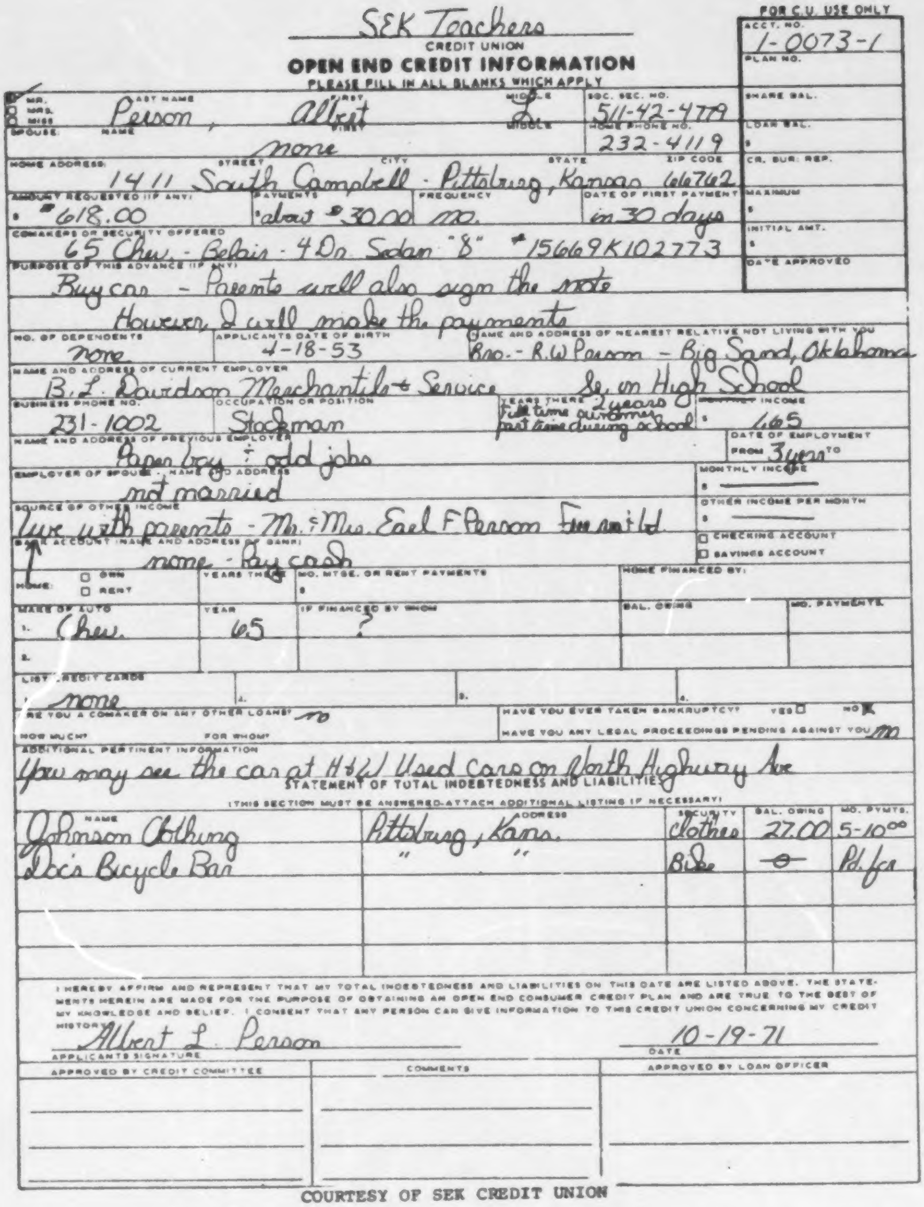
___1. Persons who are legally qualified by state law to enter into a contract.
___2. Persons who have not reached legal age.
___3. A person who signs a contract to buy merchandise.
___4. A person who offers to sell at a given price.
___5. A promise to pay off a gambling debt.
___6. Charging interest at a rate above the state law.
___7. A contract to buy real estate.
___8. Exchange of money for the promise to fulfill an agreement.
___9. An agreement between two competent parties.
__10. A person who signs a contract while intoxicated.

A. Written contract
B. Minors
C. Reached majority
D. Offeree
E. Usury
F. Void agreement
G. Consideration
H. Offeror
I. Option
J. Competent party
K. Contract
L. Lien
M. Incompetent party

III. List ten don'ts in signing a contract.

IV. Analyze the attached credit contract and answer the following questions:

1. Who are the parties making the contract?
2. What is the purpose of the contract?
3. What amount of money is requested?
4. What are the payments?
5. How often will payments be made?
6. Is a statement of indebtedness required by the borrower?
7. Can the credit union collect if Albert Person defaults (does not make payment)?
8. Does Albert have a bank account?



SEK Teachers
CREDIT UNION

OPEN END CREDIT INFORMATION

PLEASE FILL IN ALL BLANKS WHICH APPLY

FOR C.U. USE ONLY
ACCT. NO. 1-0073-1
PLAN NO.
SHARE BAL.
LOAN BAL. $
CR. BUR. REP.
MAXIMUM $
INITIAL AMT. $
DATE APPROVED

☑ MR. ☐ MRS. ☐ MISS LAST NAME Person, FIRST Albert MIDDLE L.
SOC. SEC. NO. 511-42-4779
SPOUSE: NAME FIRST none MIDDLE
HOME PHONE NO. 232-4119
HOME ADDRESS: STREET CITY STATE ZIP CODE 1411 South Campbell - Pittsburg, Kansas 66762
AMOUNT REQUESTED (IF ANY) $ #618.00
PAYMENTS $ about $30.00
FREQUENCY mo.
DATE OF FIRST PAYMENT in 30 days
COMAKERS OR SECURITY OFFERED 65 Chev. - Belair - 4 Dr. Sedan "8" #15669K102773
PURPOSE OF THIS ADVANCE (IF ANY) Buy car - Parents will also sign the note
However, I will make the payments
NO. OF DEPENDENTS none
APPLICANTS DATE OF BIRTH 4-18-53
NAME AND ADDRESS OF NEAREST RELATIVE NOT LIVING WITH YOU Bro. - R.W. Person - Big Sand, Oklahoma
NAME AND ADDRESS OF CURRENT EMPLOYER B. L. Davidson Merchantile & Service Sr. in High School
BUSINESS PHONE NO. 231-1002
OCCUPATION OR POSITION Stockman
YEARS THERE 2 years Full time summer part time during school
~~MONTHLY~~ INCOME $ 165
NAME AND ADDRESS OF PREVIOUS EMPLOYER Paper boy & odd jobs
DATE OF EMPLOYMENT FROM 3 years TO
EMPLOYER OF SPOUSE - NAME AND ADDRESS not married
MONTHLY INCOME $ ——
SOURCE OF OTHER INCOME live with parents - Mr. & Mrs. Earl F. Person Fire Cont Ltd.
OTHER INCOME PER MONTH $ ——
BANK ACCOUNT (NAME AND ADDRESS OF BANK) none - Pay cash
☐ CHECKING ACCOUNT
☐ SAVINGS ACCOUNT
HOME: ☐ OWN ☐ RENT
YEARS THERE
MO. MTGE. OR RENT PAYMENTS $
HOME FINANCED BY:

MAKE OF AUTO	YEAR	IF FINANCED BY WHOM	BAL. OWING	MO. PAYMENTS
1. Chev.	65	?		
2.				

LIST CREDIT CARDS 1. none 2. 3. 4.
ARE YOU A COMAKER ON ANY OTHER LOANS? no
HOW MUCH? FOR WHOM?
HAVE YOU EVER TAKEN BANKRUPTCY? YES ☐ NO ☒
HAVE YOU ANY LEGAL PROCEEDINGS PENDING AGAINST YOU no
ADDITIONAL PERTINENT INFORMATION You may see the car at H&W Used Cars on North Highway Ave

STATEMENT OF TOTAL INDEBTEDNESS AND LIABILITIES

(THIS SECTION MUST BE ANSWERED-ATTACH ADDITIONAL LISTING IF NECESSARY)

NAME	ADDRESS	SECURITY	BAL. OWING	MO. PYMTS.
Johnson Clothing	Pittsburg, Kans.	Clothes	27.00	5-10.00
Doc's Bicycle Bar	" "	Bike	-0-	Pd. for

I HEREBY AFFIRM AND REPRESENT THAT MY TOTAL INDEBTEDNESS AND LIABILITIES ON THIS DATE ARE LISTED ABOVE. THE STATEMENTS HEREIN ARE MADE FOR THE PURPOSE OF OBTAINING AN OPEN END CONSUMER CREDIT PLAN AND ARE TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I CONSENT THAT ANY PERSON CAN GIVE INFORMATION TO THIS CREDIT UNION CONCERNING MY CREDIT HISTORY.

Albert L. Person
APPLICANTS SIGNATURE

10-19-71
DATE

APPROVED BY CREDIT COMMITTEE	COMMENTS	APPROVED BY LOAN OFFICER

COURTESY OF SEK CREDIT UNION

World of Work Course - Senior High
"Course Goals"
Bernard Kaplan

GOALS:

1. The student will gain a better understanding of who he is, what he is like, and his desired life style.

2. The student will learn to solve personal and social-economic problems.

3. The student will gain an understanding of the variety of occupations found in the world of work.

4. The student will achieve an awareness of the educational preparation needed for various careers.

5. The student will show increased interest and achievement in basic school subjects.

6. The student will become aware of skills need for employability and how to get a job.

7. The student will be able to make intelligent decisions for placement upon graduation.

World of Work Course - Senior High
"You and the World of Work"
Bernard Kaplan

CAREER EDUCATION CONCEPT:

To understand that knowing who you are is important in deciding what you want to do in life.

THEMES AND OBJECTIVES

Themes	Objectives
Self Awareness	The student will identify various characteristics which are related to satisfaction on the job.
Self Awareness	The student will list two personal interests and identify a career which would use these interests.

ACTIVITIES:

Introduction
Most experts agree that the average person will change the kind of work he does several times in his lifetime. This may be due to appropriate opportunties. In order to evaluate these opportunities, you must learn to know and understand yourself better than you do now.

Today we will examine some people in various careers and try to identify those factors which influenced their job choices. While viewing the filmstrip, consider this question: "What is the connection between knowing who you are and success on the job?"

Tasks
1. Show filmstrip of people in various jobs.
   These people tell how they got started and why they like their jobs--desire to work alone, desire to work outdoors, desire to work with figures, desire to be creative, desire to help others, etc.
2. Have a class discussion on how knowledge of self leads to various career choices shown, such as teacher, writer, social worker, computer operator, etc. (Desire to help others, desire to be creative, interest in working with students, etc.)
3. Have each student list three hobbies or interests and then research a job in which his hobby or interest would be helpful.

Summary:
Today we have seen that there is a relationship between knowing yourself and enjoying your work. Tomorrow we will take a closer look at who you really are, so that we can have enough information for exploring careers.

RESOURCES:

Filmstrip: "The Connection" (SRA); filmstrip projector, cassette player, projector

EVALUATION:

1. Each student should be able to list two factors which lead to job satisfaction.
2. Each student should be able to list two jobs and identify a particular interest or hobby related to each.

World of Work Course - Senior High
"Who Are You"
Bernard Kaplan

CAREER EDUCATION CONCEPT:

To recognize that individuals differ in their interests, abilities, and values.
To be aware that activities that interest us can provide us with deeper personal satisfaction.

THEMES AND OBJECTIVES:

Themes	Objectives
Self Awareness	The student will describe how an individual is unique and will accept himself as such.
Self Awareness and Career Awareness	The student will be able to assess his own interests as they apply to broad occupational areas.

ACTIVITIES FOR SESSION ONE:

Introduction:
Yesterday, we decided that knowing yourself is important and related to job satisfaction and career choices. An important part of you is your interests. Today we will try to determine our interests, in an organized way, by making an inventory of our interests, with the help of a standard note.

Tasks
1. Allow students to take the Kuder Preference Record test (Form E).
2. Use remaining time to discuss students' reactions to test and to discuss the validity of test results, i.e., what does the student think about them?

Summary:
You have just completed a very important part of your attempt to get a better picture of yourself. Your answers will give you an idea of how your interests compare with those of other people. These answers may also point to some activities you may not have thought of yourself and might like to try. At our next meeting, we will score these tests and interpret them to form individual profiles of your interests.

ACTIVITIES FOR SESSION TWO:

Introduction:
Yesterday we completed the Kuder Preference Record, Form E. Today we will score the tests and thereby make up your individual profiles. This will greatly help us to examine and identify your interests.

Tasks:

1. Distribute answer sheets for the Kuder and assist students in scoring their papers.
2. Have students transfer their answers to their profile sheets.
3. Explain how to read the profile.
4. Discuss with class:
   a. Why do all the profiles look different?
   b. What does the profile tell us?
   Note: point out that on this test there are no good or bad scores. High interest scores are not better or worse than low scores. No one interest in better than another. The important thing is your pattern of interests.
5. Ask students to verify the results, using their own opinions as to where their interests lie and what they like to do. Point out that some interests may not show up on the profile and some interests on the profile may be a surprise.

Summary:

Today, we have tried to give you a picture in graph form of your pattern of interests. This should allow you to see at a glance the fields in which your interest is greatest. Tommorrow, we will consider ways of putting this new self-knowledge to work.

RESOURCES:

A class set of Kuder Preference Record Tests; Kuder profile sheets pencils for all students.

EVALUATION:

1. Have student write two paragraphs identifying how he is different from others. In this paragraph have him assess his own interests as they apply to broad occupational areas.

World of Work Course - Grades 10-12
"What Good Is School?"
Bernard Kaplan

CAREER EDUCATION CONCEPT:

To recognize that education and work are interrelated.

THEME AND OBJECTIVE:

Theme	Objective
Educational Awareness	The student will describe the relationship between success in school subjects and certain jobs, using jobs in which he is interested.

ACTIVITIES:

Introduction:
Right now school is your job. Are you getting anything out of it? Are you putting anything into it? Can you see how it is related to the rest of your life? These are some of the questions we will be considering. If you find you could be more successful in school than you are now, you'll have an opportunity later to make plans for improvement.

"Let us see if we can relate school subjects you are now taking with success on the job."

Tasks
1. Distribute teacher-prepared worksheet, "School Subjects and Jobs". (This is a sample. Teacher may use different jobs elicited from the class, and teacher may use less subjects, if desired.)

"What Good Is School?"

School Subjects and Jobs

Occupation	English	Speech	Writing	Math	Science	Social Studies	Business	Art	Music
Sales-person									
Lawyer									
Teacher									
Baseball player									
Dental Technician									
Carpenter									
Truck Driver									

Code marks to be entered in boxes:
"O" = no relationship
"U" = useful
"E" = essential

2. Ask students to complete the worksheet by making these entries in the boxes: "O" for no relationship, "U" for useful, and "E" for essential.
3. After students have completed the worksheet, discuss the findings and have students tell why they wrote what they did with concrete examples. Students should be allowed to make changes as a result of the discussion and pooling of answers. Have them place in the squares on the worksheets the rationale. If the teacher feels that important relationships have been overlooked, questions should be used to steer the class, such as, "What subjects would assist a baseball player who has to make radio and TV appearances and public relations appearances and speeches during the off-season? (This would be used, for example, if students did not see the relationship of English, speech and writing to a baseball player's job.)
4. Explain that although some subjects may be applied daily, others may prove useful less frequently, but not to a lesser degree of importance.

Summary

Today we have seen that there is a definite connection between school subjects and success on the job. In our next lesson, you will plan ways of being more successful in your present job as a student.

RESOURCES:

Worksheets - "School Subjects and Jobs"
Evaluation worksheet (see sample below)

EVALUATION:

Have students complete worksheet using jobs related to their interests, from Kuder preference or other interest inventory used earlier. Students should be able to complete this sheet and apply objective to jobs in which they are interested.

Jobs I Am Interested In	Related School Subjects	How The Subject Is Used On The Job
1.		
2.		
3.		
4.		

World of Work Course - Grades 10-12
"The Whole Truth"
Bernard Kaplan

CAREER EDUCATION CONCEPT:

To recognize that honesty is an important attitude when applying for a job.

THEME AND OBJECTIVE:

Theme	Objective
Employability Skills and Attitudes and Appreciations	The student will describe honesty as an important factor in applying for and getting a job.

ACTIVITIES:

Introduction:
Bob and Alice, who are good friends, meet at the State Employment Service, where they are both applying for jobs. While waiting they discuss how you should best present yourself to the agency interviewer. Bob is applying for a job as a clerk, while Alice is applying for a switchboard operator job. Bob suggests that it might be helpful to lie about one's background in order to make a better impression.

Tasks
Discussion questions:
1. Suppose Alice describes her job background accurately. Do you think the interviewer is likely to send her out on an interview for the job as switchboard operator?
2. Do you think Alice will have a hard time getting a job?
3. What do you think of Bob's advice to Alice?
4. Do you think Bob's attitude will cause the Employment Service interviewer difficulty in finding him the right kind of job? What kind of problems are likely to arise?
5. Suppose Alice got the job she wanted after lying about her qualifications? Do you think she might be able to learn the job quickly? What problems do you think she might have because she lied?
6. Do you know anybody who has lied when applying for a job? What did he lie about? What were the consequences?
7. Have you ever lied when trying to get a job? What did you lie about and how did this affect your chances of getting the job?
8. How can the employer tell or find out if you were lying?

"The Whole Truth"

Summary

Distribute application forms to class. Have each student select the items on the application form which require complete honesty. (Each student should be able to find at least 3 such items.)

RESOURCES:

Application forms

EVALUATION:

Have the student write a paragraph which describes his reactions to whether one should be honest when applying for a job.

CE 010 435